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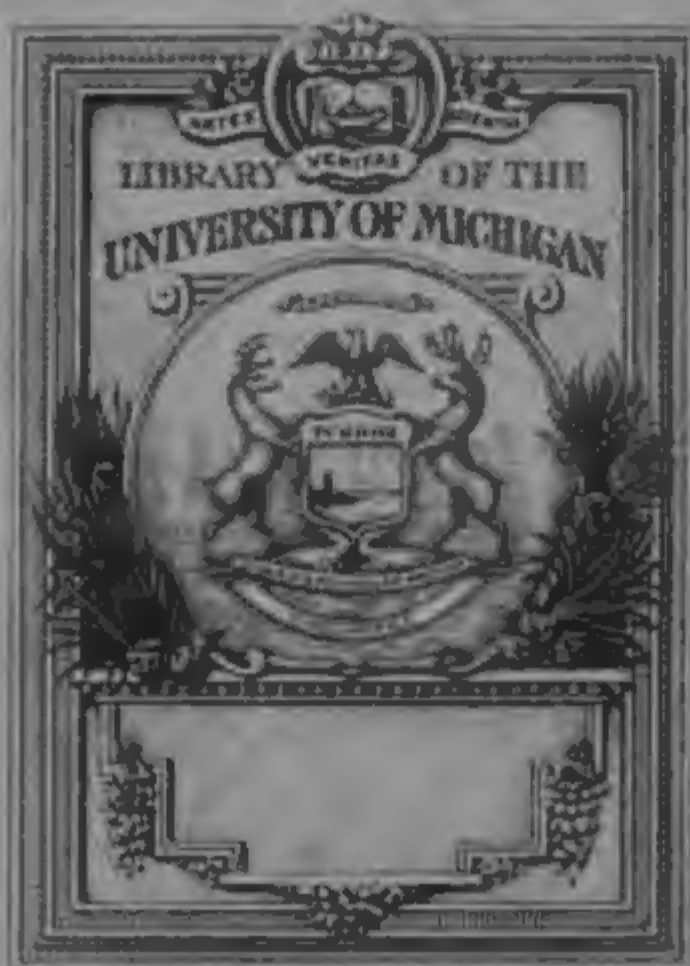
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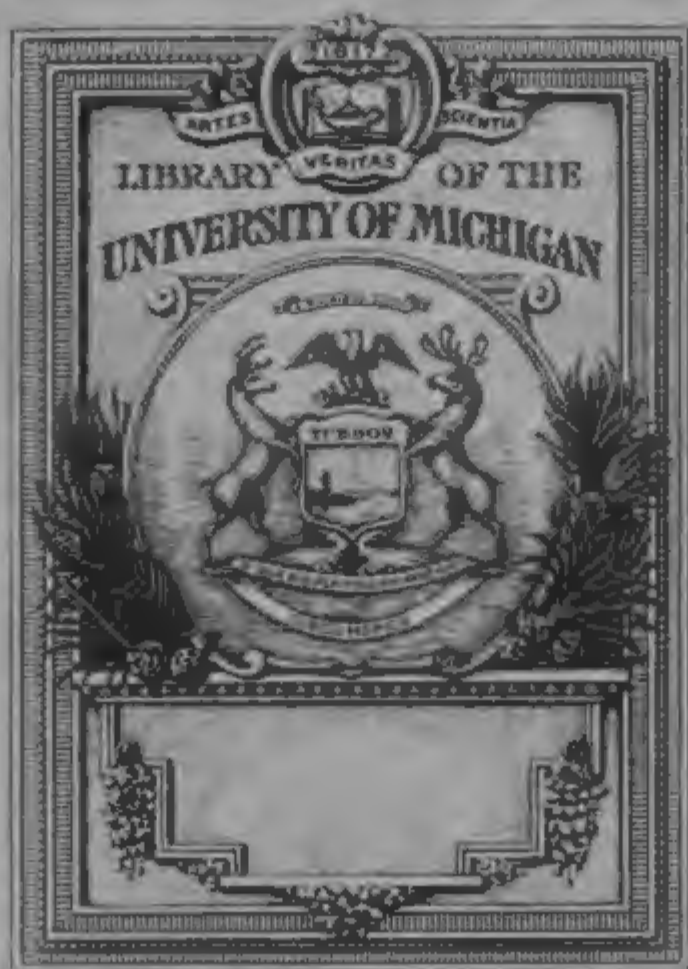
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102



THE
VIRGINIA
MEDICAL AND SURGICAL
JOURNAL.

EDITORS.

DRS. OTIS AND McCAW.

AMICUS SOCRATES, AMICUS PLATO, SED MAGIS AMICA VERITAS.

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CONTRIBUTORS TO THIS VOLUME.

WILLIAM H. BERRY, M. D., *of Washington, D. C.*

PATRICK H. CABELL, M. D., *of Selma, Alabama.*

FRANCIS H. DEANE, M. D., *of Richmond, Va.*

JOHN W. DRAPER, M. D., etc., *Professor of Chemistry and Physiology in the University of New York.*

MARSHALL HALL, M. D., F. R. S., *of London.*

GEORGE B. HUNTER, M. D., *of Harrisonburg, Va.*

CARTER P. JOHNSON, M. D., *Professor of Anatomy and Physiology, Richmond, Va.*

THEO. P. MAYO, M. D., *Resident Physician of the Richmond Infirmary.*

JAMES B. McCAW, M. D., *of Richmond, Va.*

JOHN P. METTAUER, M. D., LL. D., *Professor of Surgery in Randolph Macon Medical College.*

GEORGE A. OTIS, M. D., *of Richmond, Va.*

WILLIAM W. PARKER, M. D., *of Richmond, Va.*

SAMUEL A. PATTESON, M. D., *of Manchester, Va.*

WILLIAM A. PATTESON, M. D., *of Richmond, Va.*

A. E. PETICOLAS, M. D., *Vaccine Agent for Eastern Virginia, and Demonstrator of Anatomy in the Richmond Medical College.*

THOMAS POLLARD, M. D., *of Richmond, Va.*

G. WILLIAM SEMPLE, M. D., *of Hampton, Va.*

HOWELL L. THOMAS, M. D., *of Richmond, Va.*

DAVID TURNER, Esq., A. M., *of Richmond, Va.*

GEORGE L. UPSHUR, M. D., *Surgeon to the U. S. Marine Hospital, Norfolk.*

EDWARD WARREN, M. D., *of Edenton, North Carolina.*

INTRODUCTION TO VOLUME II.

In presenting another completed volume of our Journal to the medical public, we deem it unnecessary to make any profession of faith. When we are interrogated as to the future course of our enterprise, we consider it sufficient to point to its past. A journal at its commencement may be pardoned for proclaiming its own good qualities, for unless its judges are inclined to favour it, they will scarcely be persuaded to hear its cause; but when its trial is over, and the public have decided on its degree of merit, it is useless to soften censure by apologies, or to excite interest by promises of excellence.

We do not intend, therefore, to imitate some of our contemporaries, who think it no deviation from modesty to recommend their own labours, and believe that when they have contributed the results of their industry to their brethren, they confer an additional favour by informing them of their value.

The objects of this Journal, and the means by which it was proposed to attain them, have been already fully discussed. Its founders observed the effects of good medical periodicals in exciting and recording medical inquiries, and saw that, in Virginia, there were materials for a work equal to those procured from abroad. If there were elsewhere more practiced writers, there were nowhere better observers or better therapeutists; if, in other lands, the study of the functions and minute structures and alterations of parts were prosecuted until "the fluids alone were left to be subjected to necropsy," the profession in Virginia pursued, with equal devotion, the investigation of disease in its practical bearings, reflecting on its history, noting its symptoms, and studying its remedial indications. We appreciated the value of the resources thus accumulated, and aspired to the honour of collecting and arranging these materials.

The first section of the Journal was therefore devoted to *original communications*, and each number has contained at least one contribu-

tion from the pen of a Virginian physician. Together with these original essays, we have inserted translations of foreign productions which appeared to be of especial value.

The second section comprehends, under the title of *Chronicle of Medical Science*, extracts from works of magnitude, short translations, and abstracts from sources not generally accessible. It is designed to furnish, under this head, a notice, at least, of every new medical fact of importance.

In the *Editorial Department*, and under the head of *Varieties*, are published discussions of questions involving the welfare of the profession, accounts of the condition of medicine in different parts of the world, and such items of news as interest the physician without detracting from the serious character of the Journal. Here, too, a place proportionate to their scientific importance is assigned to the proceedings of medical societies. This section, in fact, is consecrated to whatever concerns the social organization of our art.

Each number is terminated by an extended critical *Bibliography*, in which works addressed to us by American publishers, or which we procure from abroad, are examined with loyalty, but at the same time with independence. A few lines, at least, of analysis, are devoted to every medical treatise of importance which appears. The design of this record is to make known, in a summary way, the character of medical publications, and to designate their position, whether behind or in advance of the results already acquired by science.

In carrying out this programme we have been cheered by the approbation and assistance of men of eminence in science and art. A body of collaborators has formed around us to which we may point with pride. We take sincere pleasure in expressing our gratitude to these friends for their disinterested aid. It is to their labours that the success which has attended our enterprise is due—*istis sit laus*.

VIRGINIA

MEDICAL AND SURGICAL JOURNAL.

This Journal is published in monthly numbers forming annually two volumes of eleven hundred pages. The volumes commence in April and October.

The objects proposed in its publication are the diffusion of Medical Knowledge and Intelligence; the advancement of Science; and the support of the dignity and interests of the Medical Profession.

Each number contains Original Papers, Memoirs, and Reports of Cases; Clinical Reports of the Practice in Public Medical Institutions; a Chronicle of Medical Science, presenting in a condensed form those Improvements and Discoveries in Medicine reported in the best English and Continental Journals; Bibliographical Notices of important works published at home and abroad; and Editorial Articles on Subjects of leading interest to the Profession.

In the ORIGINAL DEPARTMENT the aid of the most competent men is sought, and all communications dictated by an honest zeal for the advancement of Science are gratefully received. The Journal will never be the organ of a party, but a catholic work, in which all who love their profession are invited to join.

The following Medical Periodicals are regularly received and directly consulted by the Editors.

1. The British and Foreign Medico-Chirurgical Review and Journal of Practical Medicine. Published quarterly. London: Churchill & Highley.

2. The Edinburgh Medical and Surgical Journal; Exhibiting a Concise View of the latest and most important Discoveries in Medicine, Surgery and Pharmacy. Published quarterly. Edinburgh: Black.

3. The Retrospect of Medicine. Edited by W. Braithwaite. New York: Stringer & Townsend. (Reprint.)

4. The Journal of Psychological Medicine and Mental Pathology. Edited by Forbes Winslow, M. D., D. C. L. Published quarterly. London: Churchill.

5. *Pharmaceutical Journal and Transactions.* Monthly. Churchill: London.
6. *The Association Medical Journal.* Weekly. Edited by Dr. John Rose Cormack.
7. *The Medical Times and Gazette.* Weekly. London: Churchill.
8. *The Dublin Medical Press.* Edited by Dr. Arthur Jacob. Published weekly. Dublin: 15 Molesworth St.
9. *Half-yearly Abstract of the Medical Sciences.* Edited by W. H. Ranking, M. D. Philadelphia: Lindsay & Blakiston.
10. *The London Lancet.* Published monthly. New York: Stringer & Townsend.
11. *Dublin Quarterly Journal of Medical Science.* Edited by Mr. Wilde. Dublin: Hodges & Smith, Grafton St.
12. *The Quarterly Journal of Microscopical Science.* Published quarterly.
13. *The Edinburgh Monthly Journal of Medical Science.*
14. *Comptes-rendus hebdomadaires des Seances de l'Academie des Sciences.* Published weekly, quarto, pp. 40. Directed by MM. ——— and Flourens, perpetual secretaries. Paris: Quai des Augustins, 55.
15. *Annales de Chimie et de Physique.* Published monthly, pp. 128. Edited by MM. ———, Chevreul and Dumas. Paris: Victor Masson, Place de l'Ecole de Medecine.
16. *Gazette Medicale de Paris.* Edited by Jules Guerin. Published weekly. Paris: rue Racine, 14.
17. *Journal de Chime Medicale, de Pharmacie, et de Toxicologie, et Revue des Nouvelles scientifiques nationales et etrangeres.* Published monthly. Paris: Labe, Place de l'Ecole de Medecine.
18. *Annales d'Hygiene Publique et de Medecine Legale.* Published quarterly. Edited by Andral, Chevallier, Brierre de Boismont, etc. Paris: J. B. Bailliere.
19. *L'Union Medicale, Journal des Interets scientifiques et pratiques, moraux et professionnels du Corps Medical.* Published tri-weekly. Edited by Amedee Latour. Paris: rue du Faubourg-Montmartre, No. 56.
20. *Archives generales de Medecine.* Published monthly. Edited by Valleix, Lasegue and Follin. Paris: Labe.
21. *L'Abeille Medicale.* Published three times a month. Edited by Dr. Comet. Paris.
22. *Revue Medico-Chirurgicale de Paris. Journal de Medecine et Journal de Chirurgie Reunis.* Published monthly, octavo, pp. 60. Edited by M. Malgaigne. Paris: Paul Dupont.
23. *Repertoire de Pharmacie.* Published monthly, octavo, pp. 32. Edited by M. Bouchardat. Paris: Germer Bailliere, rue de l'Ecole de Medecine, 17.
24. *Bulletin de l'Academie Imperiale de Medecine.* Edited by M. Du-

bois, (d'Amiens,) perpetual Secretary, and M. Gibert, annual Secretary. Published bi-monthly, pp. 48. Paris.

25. *La Lancette Francaise, Gazette des Hopitaux civils et militaires.* Edited by Dr. Fabre. Published tri-weekly. Paris: 40, rue des Saints-Peres.

26. *Archives d'ophtalmologie.* Published monthly. Edited by M. Jaimain. J. B. Bailliere: Paris.

27. *Journal de Medecine et de chirurgie pratique.* Published monthly. Edited by M. Lucas Championiere. Paris.

28. *Revue Medicale Francaise et Etrangere, Journal des Progres de la Medecine Hippocratique, et Recueil des Travaux de la Societe de Medecine de Paris.* Published bi-monthly, octavo, pp. 60. Directed by M. Cayol. Paris: rue du Dragon, 16.

29. *Journal des Connaissances, Revue de Therapeutique Medico-Chirurgicales.* Published bi-monthly, octavo, double columns, pp. 32. With plates. Edited by Dr. Martin Lauzer. Paris.

30. *The American Medical Monthly.* Edited by E. H. Parker, M. D., and conducted by the Professors of the N. Y. College of Medicine. New York: Putnam.

31. *The American Journal of Science and Art.* Edited by Professors B. Silliman and B. Silliman, Jr., assisted by Dr. Dana and Professor Gray. Published the first day of every second month. (In exchange.)

32. *The New York Journal of Medicine.* Edited by S. S. Purple, M. D., and S. Smith, M. D. Published every other month. (In exchange.)

33. *The American Journal of Medical Sciences.* Edited by Isaac Hays, M. D. Published quarterly. Philadelphia: Blanchard & Lea. (In exchange.)

34. *The Boston Medical and Surgical Journal.* Edited by Dr. J. V. C. Smith. Published weekly. Boston: David Clapp. (In exchange.)

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36. *The American Journal of Pharmacy.* Edited by William Proctor, Esq. Published every second month. Philadelphia. (In exchange.)

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39. *St. Louis Medical and Surgical Journal.* Edited by Drs. Linton and MacPheeters. Published every second month. (In exchange.)

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41. *The Medical Reporter.* Published quarterly. West Chester, Pa. (In exchange.)

42. **The Medical News and Library.** Published monthly. Philadelphia: Blanchard & Lea.

43. **The Ohio Medical and Surgical Journal.** Edited by John Dawson, M. D., Columbus, Ohio. Published every alternate month. (In exchange.)

44. **The Southern Journal of the Medical and Physical Sciences.** Edited by Drs. King, Jones, Ramsey, Currey, Wood and Atchison. Nashville, Tennessee. Published every second month. (In exchange.)

45. **The Buffalo Medical Journal.** Edited by A. Flint, M. D., and S. B. Hunt, M. D. Published monthly. (In exchange.)

46. **The Scalpel.** Edited by E. Dixon, M. D. Published quarterly. New York. (In exchange.)

47. **The Peninsular Journal of Medicine and the Collateral Sciences.** Monthly. Ann Harbor, Michigan. (In exchange.)

48. **The New Jersey Medical Reporter.** Edited by Dr. Butler. Published monthly. Burlington. (In exchange.)

49. **The Nashville Journal of Medicine and Surgery.** Edited by Drs. Bolling & Eve. Published monthly. (In exchange.)

50. **The Northwestern Medical and Surgical Journal.** Edited by Drs. Herrick and Johnson. Published monthly. Chicago, Illinois. (In exchange.)

51. **Nelson's Northern Lancet.** Published monthly. Plattsburgh, New York. (In exchange.)

52. **The Kentucky Medical Recorder.** Edited by Drs. Bullitt and Breckenridge. Lexington, Ky. Monthly. (In exchange.)

53. **The Western Lancet.** Edited by Drs. Lawson and Wood. Published monthly. Cincinnati. (In exchange.)

54. **The New York Medical Times.** Edited by H. D. Bulkley, M. D., Physician to the N. Y. Hospital, etc. Published monthly. (In exchange.)

55. **The New York Medical Gazette and Journal of Health.** Edited by D. Meredith Reese, M. D., LL. D. Published monthly. (In exchange.)

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57. **The New Hampshire Journal of Medicine.** Published monthly. Concord. (In exchange.)

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59. **The Medical Chronicle or Montreal Medical Journal.** Edited by William Wright, M. D., and D. C. MacCallum, M. D. (In exchange.)

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61. **The New Orleans Medical and Surgical Journal.** Edited by A. Hester, M. D. Published every other month. (In exchange.)

THE
VIRGINIA
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FOR OCTOBER 1853.

ART. I.—*Memoir upon Typhoid Fever and Typhoidism.* By J. B. CAYOL, formerly Professor of Clinical Medicine to the Faculty of Paris; Member of many Learned Societies at Home and Abroad, etc. (Translated from the *Revue Médicale.*)

Les systèmes en médecine sont des idoles
auxquelles on sacrifie des victimes humaines.

The good sense of the public is more and more shocked by the mortality of prevalent diseases. Each day witnesses the death, in all classes of society, of youths or of persons in the prime of life, who, after having always enjoyed perfect health, and while living under the best hygienic conditions, are suddenly cut down by a fever attributed to a chill, or some other common-place cause of ordinary disease. If one enquires the reason of these unforeseen deaths, the response is always the same: *Typhoid Fever*. This newly invented epithet has acquired during the last few years a deplorable popularity; it resounds everywhere as a funeral knell, spreading terror among the people, especially among the inhabitants of the country, and exerting, from this fact alone, a powerful influence in aggravating prevailing diseases. Among the educated classes persons began sometime since to bethink themselves, and to make enquiries; and now, in the conversations of drawing-rooms, we hear questions spring, up to which the *typhodian* physicians respond with great embarrassment. It is recollected that formerly, at a period not very remote, the prevalent diseases were fevers which were designated, according to circumstances, by the names inflammatory, bilious, nervous, putrid, malignant or ataxic fever. No longer hearing these fevers spoken of, they ask in society what has become of them. For

they regret them, and they are right in regretting them; for these names gave every one a general idea of the nature of the disease, of its gravity, its danger, and even of the line of treatment which was applicable to it. Persons knew tolerably well what they had to fear or to hope. It is quite different now-a-days: When a fever has lasted more than seven or eight days, and some doctor or other has inflicted on this fever the name *typhoid*, there is nothing to be done but to bow the head and await the decree of destiny. For the typhoidian physician is essentially and necessarily a fatalist; inasmuch as he cannot become typhoidian without discarding all tradition and repudiating the heritage of those grand intellects that have rendered medicine illustrious, he has no guide but his individual reason, which is often very shallow. He is a pilot without a compass, who nevertheless professes to direct you through a sea bristling with rocks and abounding in perils: Ask of a typhoidian physician upon what principles, upon what rules he bases his treatment of typhoid fever? If he is sincere, he will reply that he does not know. If he hesitates to answer you, then interrogate his official teaching and his works; they will tell you that *in the present state of science* (that is to say, their science, science as they understand it,) nothing is known of the treatment of typhoid fever; but that a remedy is now sought, and will perhaps be found.

Meanwhile until it is found, we may treat typhoid fever indifferently by blood-letting, by purgatives, by tonics, by quinine, by opium, or even not treat it at all; because, according to certain professors of typhoidism, whatever is done, whatever treatment is adopted, typhoid fever is unaffected; it follows its course imperturbably. Is not this the fatalism of the Mussulman! Let us add that fatalism characterizes the practice as well as the theory of the typhoidians. We might cite great hospitals in Paris, in which physicians occupying the highest stations as official teachers do not treat the patients affected with typhoid fever, but abandon them to their unhappy lot, or else make use of them for some therapeutical or chemical experiment.

Such is the faithful summary of what is written, taught and practised as regards typhoid fever. It is not difficult to comprehend how typhoidism has become so popular, how it has been so rapidly propagated from the cities into the country, and how, lastly, it has in so short a time dethroned gastro-enteritis. It is because no system was ever more convenient for the superficial and ignorant. The system of gastro-enteritis had already greatly simplified the subject of fevers, by

admitting but one disease and one mode of treatment; this was the cause of its popularity. Typhoidism simplified the matter still farther by admitting only one disease, which might be treated according to one's caprice, or not treated at all, and this is why it became more popular still than Broussaism. The most idiotic medicaster, when he had named, or, as they term it, *diagnosticated* a typhoid fever, found himself upon a level with the medical celebrities of the epoch.* Whatever he did or refrained from doing in the way of treatment, he was justified beforehand by the authority of the most eminent typhoidians. If the patient died, *that* was perfectly simple: he had a typhoid fever to which he was inevitably doomed to succumb! If he recovered, what a noble triumph for the medicaster, even when he had perhaps arbitrarily imposed the name of typhoid upon a simple and benignant fever, as is constantly done!

How could it be otherwise with such a system than that it should be embraced with eagerness by the mediocrities and nullities who always form a large proportion of the medical profession as of every other? It must be admitted even that without descending so low, typhoidism could not fail to have numerous partizans. If this system is well adapted for the officers of health in the country, who, for the most part, are not guilty of much devotion to study or of great intellectual effort, it is not less advantageous for the physicians in vogue in great cities, for those especially who, indulging in the luxuries of fortune as well as the duties of the profession, are always busily occupied, and cannot practice medicine except by the watch. Instead of consuming their time in investigating the character of a fever by profound study of its exterior causes, of its symptoms, its progress, its tendencies, and above all, of its relations with the reigning constitution of disease; instead of laboriously exploring, in each particular case, all the sources of curative indications, they pronounce the sacramental word *typhoid fever*, and all is said. They are not afraid, at all events, of being deceived in this diagnosis, because they have admitted in principle that every continued fever is typhoid which is not symptomatic of a local inflammation or of a cutaneous eruption.

They are always ready, however, to admit that they do not know what typhoid fever is, and if it is really a *special fever*; but they persist none the less in always seeing everywhere *typhoid fever*, or, as they say more willingly *the typhoid affection* (*la typhoïde*), for the

* An expression consecrated in the writings of the coterie of *mutual admiration*.

word *fever* displeases the adepts of the materialist school, and they strive more and more to banish it from their language. During a few years of enthusiastic success, *gastro-enteritis* supplied the place of fever. Now, *gastro-enteritis* is no longer heard of; it has quite gone out of fashion, and *la typhoïde* has replaced it. Instead of saying, as in old times; *I have a little fever*, or ~~else~~, *I have a slight gastro-enteritis*, one will say hereafter, to give himself the airs of a man of progress: *I have or I feel a little typhoid*. . . Oh! admirable discovery, and how greatly should the sick rejoice at it!

Così va il mondo: So goes, we will not say the whole medical world, without exception, but the fashionable medical world, that which is in possession of the professorships, which perorates in academies, which fabricates fine octavos of loyal and saleable weight, which is always agitating in the name of progress, and which has never originated a single really progressive idea.

It is a striking thing and well worthy of remark! This medical world to which we are referring is far from being homogeneous, for it is composed of almost as many sects as there are individuals who lecture or write: there may be noticed pure anatomo-pathologists or organicists, eclectics, numerists, dabblers in chemistry, and mechanicalists. Ah well! all these little rival sects join in a chorus of perfect harmony as regards typhoid fever. One would say that they had adopted this trite epithet as a neutral ground, or as a haven of refuge to shelter their common ignorance of pyretology. Observe, nevertheless, that this unanimity applies only to the denomination of the disease; as soon as the question of treatment is started, there is as much discordance as there was harmony before; separations take place immediately, and each one resumes his individuality. Then the question is who shall show the greatest number of typhoid fevers cured by his method, by his own peculiar plan, a plan that has not been taught him, let it be well understood, but that he has invented; that is the capital point. After having unanimously recognized, or at least proclaimed, that typhoid disease is always of the same nature, they treat it in the most opposite modes; this one by bleeding *coup sur coup*, the other by purgatives at the commencement, a third by chlorides, a fourth, finally, by nothing or by nothings? . . .

Do not imagine that such opposite treatments correspond to diversities in the indications deduced from such or such circumstances in the disease; not at all, it is not so that the typhoidians understand medi-

cine. The science of therapeutical indications, which constitutes in fact all practical medicine; that science to which all of the great physicians of every age who have treated of epidemics, from Hippocrates to Sydenham and Stoll, have assigned such an elevated rank, that science does not exist for the typhoidian physician. *Ils ont changé tout cela*, and as the last step in their progress, they have descended to pure and simple empiricism, such as existed in the infancy of the art. Ask of one of these doctors the reason of his preference for his exclusive preference for blood-letting, purgatives or any other treatment, and he will reply to you by statistics. . . . And God knows what may be the value of statistics applied to therapeutical unities.* Always when reasoning or practical demonstration fails, each one has his statistics all ready to prove the excellence of his method.

It is thus that *rationalism*, in substituting itself for tradition, instead of relying upon itself for the progressive development of the medical art, has only produced anarchy and chaos.

Now if one could compute the thousands of human lives which are compromised every day and hour, in this chaos of practical medicine, he would acknowledge with terror that typhoidism is the most deadly scourge of our era :

Quidquid delirant medici plectuntur achiui.

According to the statistical deductions of M. Carnot, derived from the registers of the State, and which are now in the hands of a committee of the Institute, the mortality of youth has doubled since 1800. The proportion of deaths in the military hospitals has also *doubled*. Well, in this period of 53 years are included the three successive reigns of the materialist systems which we oppose, to wit: The anatomical school or organicism, the physiological school or Broussaism, and typhoidism.

Et nunc intelligite! . . .

The public, comprehending little of what is going on, but suffering cruelly from the insuccess of medicine as it is practised, turns in its despair, to the homœopathists, venders of secret remedies, and charlatans of all sorts, who promise it, at least, what medicine *à la mode* is incapable either of giving or promising.

*I should recall on this occasion the remarkable work of Professor RISUENO D'AMADOR upon the *calculus of probabilities applied to medicine*. (*Revue Medicale*, July 1837.)

The reign of typhoidism has become the golden age of quackery.

The typhoidians also begin to be alarmed at the mortality of the prevalent diseases, a mortality which is truly desolating when the immense progress made in public and private hygiene is taken into consideration. They seek in their way the cause of this disastrous mortality, and unable to discover it from their point of view, they attribute it—is it credible—to vaccination! Yes, vaccination, that idol of the nineteenth century, is now-a-days subjected to the bitterest assaults. In the first place it is reproached with being old and worn out, and not to be depended upon except for a limited number of years. If this is the whole evil, it might be remedied by more or less direct re-vaccinations, and by renewing vaccine matter by means of cow-pox, as has been already done. But there is another reproach which is far graver still if it is well founded. It is pretended (without other proof than very contestable statistics) that vaccinia, by preventing the eruption of variola in childhood, does not destroy the unknown germ of that disorder, and that this germ is subsequently developed in adult life, producing either variola itself, or else some other grave disease. This argument, or rather this prejudice, is precisely that which has prevailed among the populace and the old women since the announcement of vaccination. Do physicians, who have heretofore laughed at it, intend now to entertain it seriously? It is a fact that some typhoidian physicians openly accuse vaccination of increasing the prevalence of typhoid fever,* and that they even consider vaccination the principal cause of what they call *the typhoid constitution of the century*. It would undoubtedly be a great consolation to the typhoidians if they could succeed in making vaccinia their scape-goat, and could render it responsible for the mortality of prevalent diseases. But this presumption is still purely hypothetical. And yet they already talk of abandoning vaccination in order to revive inoculation. A professor to the faculty has declared himself a partizan of this reform, and teaches the practice of inoculation to his pupils, as he himself learned it from the inoculating physicians of the last century.

I have no intention of interfering at this time in this crusade against

* On this whole subject consult the article of M. Bayard in the June number of the Virginia Med. and Surg. Journal. (Vol. I., p. 207, *et seq.*) The physicians referred to are probably Ancelon and Bayard. Professor Trousseau is said to lean the same way, having declared that "vaccination was an error which had had its day." (See *Gazette des Hopitaux* for March and April, *passim.*)—ED.

vaccination. Until light is thrown on this question, if indeed this is ever to be hoped for, I cannot forego a certain distrust. I fear some new retrograde progress, some step backward, like typhoidism; I do not believe that the existing school can realize any useful and serious progress, until it abjures its false principles, and resumes the doctrines of the Hippocratic or traditional school.

This is all I have to say in regard to the propagation of typhoidism and upon its practical results.

As to the system, considered as a scientific conception, it originated (as all the false systems which have succeeded each other since the close of the last century) in the exigencies of material philosophy, that yoke which official medical teachers have not yet shaken off. This is what I attempted to demonstrate twelve years ago in replying to an honorable and learned colleague, who asked my opinion in regard to the yet recent invasion of typhoidism. I will reproduce that letter and my answer, as published in the *Revue Médicale*, for July 1842. They will be found to contain a serious and profound discussion of the basis of the new system, examined in the only work *ex professo* which it has yet produced.

M. Gibert's Letter to M. Cayol.

“The judicious and striking remarks which you have recently made upon the epidemic at Avignon and Strasbourg, have encouraged me to address to you a few words upon the prevailing epidemic in Paris, which is generally designated by the name of typhoid fever.

I was present lately at a meeting of hospital physicians and city practitioners, when various questions connected with the reigning epidemic formed the chief topic of conversation. I learned that at one hospital containing 230 beds there were upwards of 60 cases of typhoid fever at one time; another gentleman informed us, that he also had a great number under treatment, and had not lost a single case out of several hundred; I heard from the lips of a third the important information that provided no active treatment was employed, and the *expectant* method chiefly trusted to, typhoid fever would *always* terminate happily; a fourth added, that he thought mild laxatives in many cases useful. All agreed in designating the disease as *typhoid fever*.

But, although this name may have been brought into fashion by a school which is willingly satisfied with words in place of things, who is there that will not admit that the appellation is ill-chosen at

best, and that in particular it cannot be applied to the epidemic now prevailing in this metropolis? For in what does this epidemic really consist? In fevers induced by the continued heat of an unusually warm summer, which has caused the development of diseases analogous to those which prevail in tropical climates. Now these fevers (usually of a benignant form) assume very rarely the proper typhoid character; but are usually of a bilious or catarrhal form; in some cases, the fever is inflammatory and continued; occasionally it is more or less remittent; and still more rarely has it anything of an adynamic or putrid character—the very character, be it observed, to which the name of typhoid would be least inapplicable. All these forms of febrile disease are evidently attributable to the mode of reaction in individual cases—a reaction which manifests itself in different ways, according as the constitution of the patient is either sanguineous, bilious or nervous.

I have several patients in my service of skin-diseases at the Hospital St. Louis, affected more or less severely with the epidemic. In some it has been only an ephemeral fever, which passed off by sweating in two or three days; while in others the fever assumed the catarrhal form; cough, nausea, slight diarrhoea, and a white coating of the tongue, being the most prominent symptoms. In one of the patients the ataxic variety of the disease was characterized by restlessness, delirium, paralysis of the bladder, and constipation of the bowels. In a few cases the symptoms have been remittent. Now I ask, is it not prudent to retain the old classic names of these various forms of fevers, rather than to blend them all together under the single appellation of *typhoid*?—which, as far as the present epidemic is concerned, is unquestionably the least applicable of all. Is there not a great practical advantage in retaining names which in themselves suggest therapeutical indications? and has it not been clearly shown that the pretended success of certain statistic physicians, who have boasted of the results of a particular method of treatment, are explained by the erroneous use of this phrase, *typhoid fever*?

If you will allow me to add one word upon the treatment of the reigning epidemic, I will say in conclusion, that while concurring with the majority of my colleagues that in most cases the expectant treatment is safest and most judicious, still I have employed quinia with decided benefit in cases presenting a remittent character (usually without shivering at the commencement of the paroxysm,) and in ataxic ca-

ses; and when there was excessive vascular action, I have had recourse to moderate depletion with advantage.

I should be happy if this brief letter might induce you to develop, in one of those articles so weighty in thought and so serious in language which you have the gift of writing, the refutation of the doctrines of the pretended eclectics among us.

Receive, etc.

GIBERT."

Letter of M. Cayol to M. Gibert.

"You ask me to talk with you on the subject of typhoid fever. Alas! you well know what I think of it: you wish me to put my hand into an open wound, to lay bare the miseries, and to expose the infirmities of the school that has been called the materialist, the anatomical, the anatomo-pathological, the physiological, the organic, the eclectic, or by what other epithet you may choose to name it; for it is always the same.

In zoological science in general, as in medicine in particular, in ultimate analysis there cannot be more than two schools:

One views the organs of the body, whether in a healthy or diseased state, as the instruments of life; diseases, as abnormal reactions or functions of the organism; and organic alterations, as effects and eventual results of these abnormal functions and reactions; this is ours; this is the vitalist or spiritualist school in medicine.

The other seeks and pretends to discover, in the organs or their texture, in the molecules of which they consist, and in their material alterations, the *why* and the *wherefore* of life, and of all the physiological and pathological phenomena by which it is manifested: this is the anatomical or materialist school, with the synonymes of which you are familiar.

This school, the superannuated daughter of the philosophism of the last century, has no longer any point of support in general philosophy, which has shaken itself free from the materialist fetters, to soar to a more elevated intellectual sphere; but it now rests upon a spirit of coterie and mutual admiration which has succeeded marvellously well of late years. Adroit in profiting by all political circumstances on every occasion, it has got itself installed in all the professorial chairs, and into almost every scientific position; and thus it has acquired a sort of

monopoly of the public teaching of medicine, most zealously excluding every one who does not hold the same opinions, from having any share along with it. Every work that is purely intellectual is displeasing to it, and will often excite a movement of repulsion on its part; for it knows nothing and appreciates nothing but figures and material phenomena.

If, in a *concours*, it is wished to defeat a man of real talent, whose independence of character gives offence, whose mind has roved beyond the narrow circle of anatomism, some mediocrity is always found who will blindly obey the dogmas of the sect, and it will adopt such a man however ridiculous he may be :

Dignus, dignus est intrare in nostro docto copore !

The coterie does not love the *Revue Médicale* ; it reads and profits by it as much as it can, but it never mentions it. That is its tactics. It has long since placed us upon the *index*.

As long as the anatomical school had a head, poised on the broad shoulders of Broussais, it managed to maintain the attitude of a doctrinal system. By pushing to the extremest limits the localization of diseases, and referring to an inflammation of the gastro-intestinal mucous membrane all the phenomena of essential or primary fevers, the celebrated reformer solved in his way, and by determined principles, the great question of fevers, which is the culminating point of every medical doctrine.

When Broussais died, his school died with him ; no head, no doctrine :—or rather, the doctrine died first, for every one knows that Broussais survived by several years the death of his intellectual offspring. There was moreover a schism in the camp of the materialists. The present coterie, which already bestirred itself not a little, occupied the same position in the school of medicine which the *doctrinaires* do in that of politics ; they are so called because they have no doctrine, and yet they regard themselves as the sole adepts in government-craft. This coterie refused to acknowledge Broussais as its legitimate head ; it threw off the appellation of *physiological*, and assumed that of *anatomo-pathological*, *organic* and *eclectic*. Still, the system of *gastro-enteritis* being obsolete, the immense problem of fevers was without a solution, and rested with all its weight upon the feeble school which had wished to substitute its dogmas for Brousszism.

The embarrassment was great. M. Andral, who at that time was

engaged in publishing a second edition of his *Clinique Médicale*, no longer knowing what to do with fevers, left them out altogether. “*The progress of science*, he said in his preface, has induced me not to devote, as in the former edition, a special volume to fevers.” Singular *progress* that! A few such steps and medical science would be reduced to *zero*. “Yet, continued M. Andral, I have carefully preserved all the observations contained in that volume; but I have now given them another place, arranging some of them among the *diseases of the abdomen*, and others among the *diseases of the nervous centres*.”

We clearly perceive by these timid and embarrassed remarks, that the young professor had retained a slice of the system of gastro-enteritis, since a portion only of the volume upon fevers was transposed to the section on diseases of the abdomen. We see also that he attempted to stitch upon this slice of a doctrine, a fragment of another of quite a different nature:

Unus et alter assuitur pannus.

This position was quite untenable, as I have demonstrated some time since.

Physicians were unwilling to employ the expression gastro-enteritis to designate fever in general, because it recalled the dominion of Broussais, and they did not wish to appear to belong to that school. It was the policy of the coterie to erect altars against altars, to constitute a separate school, or even many schools, for, after all, each one wished to have his own. The sarcastic severity with which Broussais was accustomed to rebuke these ridiculous pretensions is well known.

The terms dothineritis, follicular enteritis, intestinal exanthem, etc., were not pliant enough to embrace every variety of fever. A new phrase was therefore necessary, and it was resolved to call the disease *typhoid fever*; and subsequently in order to get rid of the objectionable word “fever,” it was denominated *typhoid affection* or *disease*.

Rare et sublime effort de l’imagination!!

The word typhus, in Greek τυφος, signifies stupor; and hence, Hippocrates and many writers after him, applied the name of *typhus* or *typhous fever* to certain grave continued fevers in which stupor was the predominant and characteristic symptom. But the epithet *typhoid fe-*

ver or *affection* applied to continued fevers in general, only characterizes utter confusion of ideas and absence of sound medical doctrine.

What is a fever or disease which resembles typhus but yet is not typhus? When we speak of *varioid*, we signify an exanthem which approaches more or less nearly in its symptoms to genuine variola. We see pustules here and there, and compare their form, colour and mode of development, and judge whether there is identity or only resemblance to small pox. But it is impossible to conceive of anything which resembles stupor, and which is not stupor. In this simple phenomenon, whatever its degree of intensity, there is no longer anything to compare.

Explain yourselves, gentlemen of the anatomical school. Is there always stupor in these diverse and opposite fevers which you so arbitrarily group together? If there is no *τυφος* or stupor, why call the disease typhoid? how can it have any resemblance to the fever, the very name of which points to this as its characteristic phenomenon? If stupor does exist, why not call it typhus or typhous fever?

It is because materialist prejudices are present with their demands, and because this sect, unable to characterize fever by any single anatomical fact, has not the courage to characterize it openly by the expression of any vital phenomenon, as stupor; it is afraid of appearing vitalist; and hence, as it would be rather ridiculous to give the name of *typhus* to a multitude of trifling febrile diseases which no more resemble the genuine typhus fever than the bite of a flea does an attack of apoplexy, they have happily bethought themselves of the word *typhoid*—a word which, expressing only a vague analogy, it was supposed might be applied to all the fevers which they despaired of being able to characterize by local lesions.

Nevertheless a man appeared of wonderful mental tenacity, and of indefatigable patience, who did not despair of discovering the anatomical character of typhoid disease, that is, as he understood it, of continued fever in general.

Fortified with his anatomical knowledge, with his eyes, his hands and his scalpel, he undertook the hardest and most fastidious task that any physician perhaps ever accomplished in behalf of the *interests of science*.

During six consecutive years, he subjected himself to the task of accumulating and submitting to what he called a numerical analysis, all the cases of acute disease, of whatever nature, which were received in

M. Chomel's wards at La Charité; and this with the preconceived design of comparing *acute typhoid affections* with *acute non-typhoid affections*, as regarded their symptoms as well as their organic lesions.*

We observe already that to establish his field of observation, M. Louis takes for granted what is disputed, and that instead of taking his starting point from something known and established, he traces an imaginary line. Can anything be more fanciful and arbitrary than this *a priori* division of diseases? This is a vain hope of solving a difficult problem by an insignificant and valueless word; it appears to me impossible to conceive of a more complete confusion of medical ideas.

Let us pass on, however. Here are hundreds of acute diseases of every variety, accompanied by 133 autopsies, minutely described and exactly recorded. In the first place, it is necessary to separate all these diseases into two categories, and to compose two unities in order to have the elements of a binary comparison.

How does M. Louis do this? He abstracts the pneumonias, pleurisies, apoplexies, and in a word, whatever he calls an acute inflammatory affection. He adds to these eruptive diseases, and of all together he constitutes his category of *acute non-typhoid affections*.

All that remain after this process, whatever is not an inflammatory or eruptive disease, belongs to *typhoid fever*.

Thus are constituted two categories, two nosographical unities, the comparison of which, symptom by symptom, lesion by lesion, organ by organ, by means of *numerical analysis*, must lead to the discovery of the anatomical characters of typhoid fever, or in other words, of the *seat and nature* of that disease.

Did any one ever see two unities made thus? Does it not appear like an attempt to parody an excellent law of nature, *unity in multiplicity*, which law has nothing to do with the matter.

If these two unities, composed of such a large number of diverse and complex pathological individualities, were really distinct and separate; if there existed as clear a line of demarcation, or nearly so, as M. Louis has instituted with his pen between the two columns of his register, we might hope for some result from the comparisons he pro-

* Recherches anatomiques, pathologiques et therapeutiques sur la maladie connue sous le nom fièvre typhoïde, putride, adynamique, ataxique, bilieuse, muqueuse, gastro-enterite, enterite folliculeuse, dothinenterie, etc., comparée avec les maladies aiguës les plus ordinaires: Par P. C. A. Louis, médecin de l'Hôtel-Dieu, etc. Deuxième édition. Paris. 1841. 2 vol. in-8.

poses; but the least reflection suffices to show that this is not the case, that the reverse is true.

Who can believe that, in the category of *acute typhoid diseases*, M. Louis has not, perhaps quite unconsciously, admitted on the one hand some inflammatory diseases, and on the other hand some diseases that are not really typhoid? If any one could believe this, his mind would be instantly disabused by reading the author's own observations; for we find in the details of his autopsies, that in nineteen cases of *typhoid fever*, there was found more or less decided carnification or splenisation of the lung; that in several other cases tubercles or other pulmonary lesions existed, and in short that out of 45 deaths from alleged fever, these organs were sound in 15 only; in 19 there was pleuritic effusion, in many others considerable congestion of the pia mater, in some albuminous false membranes on the cerebral surface, and in some others partial softening of the substance of the brain.

After this M. Louis enters upon endless wearisome anatomical subtleties, to prove that such an one of these various lesions was not precisely like those found in subjects who die of *acute non-typhoid affections*, or that such another was of very slight importance. . . . We know what value to attach to facts like these; we have also made autopsies, a great many of them, during a long series of years. M. Louis does well to say so. The remark remains and will remain.

And in the other category of diseases, those which are arbitrarily designated *non-typhoid*, is it possible to imagine that, among all the cases of peripneumoniâ, angina, scarlatina, apoplexy, and especially among the cases of protracted disease, there were not many which had as much of a typhoid character as the contents of the other category?

And among the patients in the two categories who recovered, can we not legitimately suppose that there was a greater confusion still than in regard to those who perished?

Let all these remarks be carefully weighed, let us suppose, if it is possible, by some approximate data which may be easily deduced from what has gone before, the innumerable sources of error which emerge on every side on such a bad field of observation, and then decide whether we have here the proper elements for legitimate deductions.

M. Louis, unembarrassed by difficulties of which he does not appear to dream even, imperturbably prosecutes his work.

In the first part he presents eighteen excellent observations of typhoid fever to serve after a fashion as a type of the disease. Each of

these observations is terminated by a most detailed account of the autopsy, followed by some reflections and commentaries upon the symptoms and also upon the organic alterations. He finds in all an alteration of the agminated follicles, called Peyer's glands, or *plaques elliptiques* of the small intestine, which are more or less red, tumefied, hard or soft, ulcerated or non-ulcerated, according to the intensity of the lesion. Corresponding alterations of the mesenteric glands are also found; these are more or less enlarged, reddish or blueish, softened or indurated, and sometimes in a state of suppuration, especially towards the extremity of the ileum, near the cœcum, etc.

The second part, entitled *General Description of the Organs*, comprises a successive comparative description of all the viscera in subjects who have died of typhoid fever, or have died of other acute diseases. Be it observed the author proceeds always by the method of *numerical analysis*, which consists in making arithmetical estimates of all of the changes of colour, consistence, texture, volume, etc., which are found in each viscus, and in comparing these estimates in order to determine the relative frequency in the two categories of each of these alterations. The author thus passes in review in so many separate articles, occupying three hundred pages, not only all the large and small organs of the body, but also their appurtenances and dependencies; he forgets nothing, not even the excrement contained in the large intestine, the quantity, colour, and consistence of which he carefully records, in order to be able to assert precisely how often it was liquid, soft or solid, green or yellow, etc., in the *acute typhoid diseases*, and subsequently comparatively in the *non-typhoid affections*. By this detail, the rest may be conceived: *ab uno disce omnes*.

The conclusion of all these arithmetical calculations and comparisons is, as one might have foreseen, that alterations of the elliptical patches of the small intestines are found in all subjects who have died from typhoid fever, and that they are not found in subjects who have died of other acute diseases. True, we find in the latter ulcerations in the intestines, and even tumefaction and redness of the mesenteric glands, but these ulcerations do not precisely affect the *plaques elliptiques*; and you will easily comprehend the great difference! Be careful not to confound in practice diseases so dissimilar, the mistake might be most serious!

Thus then, M. Louis has gathered the fruit of his long and laborious task. The problem is solved; the discovery he wished to make, he has

made. That it may not be supposed that we are wronging M. Louis, we shall let him announce the precious results of his observations and calculations in his own words:—

“The elliptical patches of the small intestines having been found to exhibit a morbid alteration only in those persons who have died of the typhoid disease, this alteration having been constant, usually very serious, always developed according to the same law, whether death has arrived after eight days sickness or after a much longer interval, and having been also in some cases the only lesion present, it is necessary not only to regard it as *peculiar to the typhoid affection, but as constituting its anatomical character*, just as tubercles do that of phthisis, whatever may have been the cause which induced their development.”*

Here, in fact, M. Louis' work concludes, as far as we are concerned; it has already seemed very long, and yet we have not reached the end of the first volume; all that follows adds nothing to the certainty of the demonstration.

In the third part, entitled *Description of Symptoms*, the indefatigable author proceeds to discuss comparatively the symptoms of acute typhoid and non-typhoid diseases, by the same method of numerical analysis, and with the same minuteness as he has already displayed in regard to the lesions of the various organs found on dissection. Four hundred mortal pages scarcely suffice him to register an infinite number of minute, tedious, isolated pathological and semeiological details, which are subsequently arranged in arithmetical tables, which can never impress the mind or be fixed in the memory from the utter absence of all logical cohesion between them. By such a method as this the observation of the living man is more dry, barren and fanciful than that of necroscopic phenomena in the dead, as the former will not yield so readily to isolation and arrangement of appearances as the latter. Instead of a series of living and animated pictures, the study of diseases becomes nothing but a dead letter.

I shall not follow the author into the domain of semeiology; it would be useless as far as my object is concerned. I cannot leave this portion of the work, however, without a single reflection. That a person should write a work of this character, should draw up cases minutely, and analyse them in different ways, is quite natural. Every one has his method of working; and provided he arrives at some useful results, no one will call him to account for the means by which he has attained them. But to print a medley of notes and calculations,

* *Op. cit.*, tome premier, p. 199.

and to compose heavy volumes of them, is not this letting the public into the confidence of one's studies for a price?—a dear price too, when it is remembered that the public consists chiefly of young students who have to economize both time and money. If M. Louis, for example, had been content to publish the *results* of his researches upon typhoid fever, supporting them by a few chosen cases, and explaining his process of numerical analysis, so that every one could verify them at his leisure, his work would certainly have been quite as instructive, and much more readable. When the house is built they usually take down the scaffolding, unless they wish to leave it to conceal some defect in the construction. I return now to the grand discovery of the *plaques elliptiques*, which it is full time to examine, and to reduce to its proper value.

In this discovery there are two things to examine: The anatomical fact and the medical induction.

1. *The anatomical fact.* Since autopsies have been made carefully, and especially since late theories have called the attention of pathologists to the intestinal canal, nothing is more common than to find more or less numerous ulcerations of different sizes in the bowels; they are sometimes superficial, and sometimes deep enough to cause perforations of the bowel, a melancholy accident, *always** followed by fatal peritonitis, which is fortunately very rare. These ulcerations may affect the isolated mucous crypts of Brunner, and the agminated follicles of Peyer, as well as other portions of the mucous membrane. They are found not only in subjects dead from acute diseases, but also in those who have succumbed to chronic effects, particularly phthisis. These ulcerations depend upon various causes, which I need not now consider. Some appear to be primary; others are evidently the result of intestinal exanthemata. They are generally cured easily, where the causes which produced them no longer subsist; at least we must judge so from the cicatrices we find in the bowels taken in connection with pathological facts.

All this was public property. Now here is the NEW FACT, in all its immensity.

* As is well known, there have been a number of striking exceptions to this rule. Two cases of recovery in which there could be no doubt of the correctness of the diagnosis *perforation of the bowel*, have occurred to Professor Wood.—[Ed.]

M. Louis appears, book in hand, and says :*

“Observe closely these mucous crypts, these glands, which in their normal state are almost imperceptible, which are usually called glands of Peyer, and which I habitually denominate *plaques elliptiques de l'intestin grêle*. These infinitely minute organs, which, notwithstanding their agglomeration, have so long remained unperceived, and to which anatomists were at a loss to attribute any function except the secretion of a little mucus, these organs are destined hereafter to play a grand rôle, nay, the first rôle in pathology. They have far greater importance, I do not say physiologically, but pathologically, than the liver, the spleen, the lungs, the encephalon itself; for I have discovered that they are *the seat* of all those numerous and varied diseases so fatal to the human race, so discouraging to physicians, which recur in epidemics under so many forms, which have exercised the sagacity of the greatest geniuses from Hippocrates until now, of those diseases, lastly, which have been so improperly called *primary or essential fevers ! !*”

“† We should not rely upon the authority of the ancients in questions relating to the locality of diseases, because these questions cannot be solved without the comparison of symptoms with lesions, and the ancients were ignorant of pathological anatomy.”—And as to the moderns, all their labours hitherto have thrown no light upon the subject of fever. Pinel divided that great class of diseases into six orders, which he designated by the names of inflammatory, bilious, mucous, adynamic, malignant or ataxic fever, and adeno-nervous fever or plague. The illustrious author of the physiological doctrine considered all these fevers cases of *gastro-enteritis*. Nevertheless, “‡ notwithstanding the labors of Prost, of MM. Serres and Petit, of M. Bretonneau and some other contemporaneous celebrities, at the moment of the publication of my researches, physicians were far from being decided as to what was to be done with Pinel's six orders of fever. . . . Now the confusion is at an end : it is ascertained that *all* the fevers enumerated by Pinel, *except the plague*, form only one and the same

* What follows, although in inverted commas, is not extracted literally from M. Louis' book ; but it is an analytical summary, for the scrupulous exactness of which I pledge myself; if not the words, it conveys always the precise meaning of the author. The best method of refuting a false system is to lay it bare, to divest it of all its scientific parade, by which its errors and absurdities are concealed.—AUTHOR.

† This is extracted literally.

‡ Literal extract.

disease, the anatomical lesion of which consists, not in an inflammation of the stomach and intestines, but in a profound and specific lesion of the elliptical patches of the small bowels. Those who have hitherto defended the doctrine of fevers with the greatest pertinacity, have abandoned their position, and recognize, as M. Chomel* has done, the exactness of the facts which I have observed, and of the conclusions which I have deduced from them.

“Recollect, therefore, that there is no longer such a thing as inflammatory fever, or bilious, or putrid or malignant fever: we have changed all that; remember that all these fevers are comprised in typhoid fever, inasmuch as they all have, as their common characteristic, a profound and specific lesion of the elliptical patches. I call this lesion specific, although it is common to all continued fevers, First, because I only admit one continued fever, and secondly, because this lesion is the only characteristic which distinguishes these from other acute diseases.”† For, except the alteration of the elliptical patches, all the lesions of the enteric mucous membrane observed in cases of typhoid affection, are found in individuals who have succumbed to other acute diseases; indeed, the frequency with which they are observed in the two orders of cases, presents very little difference.

Such is the anatomical fact on which the discovery of M. Louis reposes, or rather which constitutes it altogether. *A specific alteration of the elliptical patches of the small bowels*, the only characteristic of the typhoid affection, that is of fever in general, of Pinel’s six orders of fevers; in a word, of every continued fever which is not a local phlegmasia or an eruptive disease.

For the anatomical fact to be true in the extended sense which M. Louis insists upon, it is obviously quite necessary that the alleged alteration of the glands should be found in every case of fever, from the mildest to the most malignant form, and that it should never exist in cases of local phlegmasiæ or other acute non-typhoid diseases. This is what the author pretends to have demonstrated. But arguments

* M. Chomel had, in fact, defended the doctrine of fevers against Broussais, but with such feeble arguments, that M. Broussais amused himself by refuting him and reducing him to silence. M. Louis is not unaware that the *Revue Médicale* also defended and continues to defend the doctrine of fevers with as much pertinacity as M. Chomel, and perhaps with more success, since Broussais was never able to refute one of its arguments; why does he not speak of us? Doubtless he has his reasons.
AUTHOR.

† Literal extract.

against this pretended demonstration abound; I find more than I require in the author's own observations.

He excepts himself, *proprio motu*, the plague, (adeno-nervous fever of Pinel,) and yet surely it is neither an acute phlegmasia nor a simple eruptive disease. He excepts yellow fever, Asiatic cholera, and the typhus fever of English writers, inasmuch as in all these diseases, which are most assuredly continued fevers of the gravest description, the glands of Peyer are in a natural condition.* And he does not perceive that such considerable exceptions destroy his system! A more singular exception still is the fever of camps and jails, the true typhus, which he should naturally consider the prototype of typhoid fever; in which, however, alteration of the agminated glands are not always observed.†

Again, M. Louis is forced to admit a *latent* typhoid affection, to explain those cases in which the specific alterations of Peyer's glands is observed in patients who had not exhibited any of its usual symptoms during life; and also a simulated typhoid lesion to account for other cases, in which all these symptoms were present during life, and yet the special alteration was not discoverable on dissection: forgetting that he had committed himself in another passage, by acknowledging, that "if he ever observed a case in which all the symptoms now known of typhoid fever existed, and where nevertheless the glands of Peyer were unaltered, he would not rank such a case among those of typhoid fever."‡

Here is a still more remarkable contradiction. After a long dissertation upon an epidemic of typhus fever, which prevailed in Philadelphia in 1833, and in which the post-mortem examinations, made with the greatest care, showed no alterations of the Peyerian or mesenteric glands, M. Louis declares, that "we cannot assign any seat to this disease, and thus far it has no anatomical characteristic, and, adds he, one feels one's self naturally led by the history of this epidemic to say with M. Valleix that typhus fever may be really considered an essential fever.§ Oh! Oh! M. Louis, you admit then an essential fever! Then what becomes of your theory of elliptic patches, and of your exposition of typhoid fever?

* *Op. cit.* T. premier, page 198.

† *Ibid.*, Tome II., page 311.

‡ *Op. cit.*, Tome II., page 316.

§ *Ibid.* Tome II., page 325.

After so many exceptions, so many contradictions, and so many beggings of the question at issue, is it necessary that I should adduce other arguments? Shall I speak of simple inflammatory or bilious fevers cured after a few days diet, which must notwithstanding be ranked among continued fevers when they present none of the symptoms of local phlegmasiæ or of eruptive disease? Must we admit in these frequent cases, upon M. Louis' assurance, and contrary to all probability, a special alteration of the glands of Peyer?

I think that I have said enough to prove superabundantly that the anatomical fact of M. Louis is not true in the wide and general sense in which he applies it.

2. *Medical Induction*. Now that we know what to think of the anatomical fact, let us adopt for a moment the author's hypothesis in order to judge better of the inductions which he bases upon it. We will admit the existence of an alteration of the glands of Peyer in all continued fevers; does it necessarily follow that all these fevers, differing in their causes, symptoms, tendencies, in the accidents they are apt to produce, and especially in their curative indications, are one and the same disease? Yes, perhaps, for the mere anatomist absorbed in the examination of the dead body, and unobservant of the phenomena of the living one, but certainly not for the physician who studies diseases with a view to their treatment and cure: unless indeed, after the example of M. Louis, he wholly rejects the experience of centuries, to make *tabula rasa* of medicine, and to commence our science *ab ovo* with the dissection of the aggregated follicles of the small intestine.

What! because, in all these fevers, you suppose a lesion of the elliptic patches, do you think that inflammatory, bilious, and nervous symptoms are no longer to be taken into account? Will these various symptoms represent the same condition of the organism in your eyes; will they not call your attention to one organ suffering more than another, or aid you in the choice of a remedy? Will you keep your eyes stupidly fixed upon the *plaques elliptiques*, and do nothing for fevers until you have discovered some specific for the lesion of these glands?*

M. Louis does not recoil before any of these consequences of his theory; I can affirm that they are all implicitly accepted in his work; and from this you may judge of the *medical induction* of the anatomical fact already appreciated.

*Professor CAYOL has evidently not heard of the specifics of Drs. Wood and Mitchell—oil of turpentine and nitrate of silver.—[PRINTER'S DEVIL.

There is still a fourth part in the work, entitled *Treatment*, which occupies not less than 120 pages. It consists of seven chapters, which treat successively of bloodletting, of purgatives, of opium, of tonics, of blisters, and of ice applied to the head. On each of these remedies, we have new arithmetical data and nothing more. A given number of patients have been bled; so many have been purged; a third set have been treated with opium, and so on. We are told how many recovered, how many died under each mode of treatment:—among the latter what patients died the 10th, on the 15th, or on the 20th day; and among the former, what were the mild and what were the malignant cases.

All this suggests the idea rather of a chemist operating upon a portion of intestine in a retort with a variety of reagents, than of a physician giving the results of his clinical observation. The result is, that according to his taste one may treat the *plaques elliptiques*, otherwise called *typhoid affection*, by bloodletting or by purgatives, with almost equal chances of success. M. Bouilland's bleeding *coup sur coup* does not reach a high mark on M. Louis' numerical scale; as to other medications, arithmetic has not yet decided anything very positive as to their degree of utility. We must wait for fresh figures and new calculations.

If then, the anatomical fact upon which this whole work is based, is untrue in the general sense the author attributes to it; if on the other hand the inductions upon this fact lead only to absurd conclusions, what then becomes of typhoid fever? Nothing, absolutely nothing, as far as practical medicine is concerned, but a senseless phrase no better than the *peccant humour* of olden times, which should be excluded from medical language, as perpetuating a deplorable confusion of ideas. As for pathological anatomy, there remains a mass of facts, collected with minute exactitude, awaiting a better system of coördination and interpretation.

The *Recherches sur la fièvre typhoïde* may be cited as a curiosity of a new sort, which unfortunately is prodigiously tiresome. It is a work without thought or judgment, because the author wished to make it so. Adopting as his motto the sentiment of a celebrated sophist,* he believes that he is bound to abnegate his intellect, and to accept pas-

* Je sais que la vérité est dans les choses et non dans mon esprit qui les juge, et que, moins je mets du mien dans les jugements que j'en porte, plus je suis sur d'approcher de la vérité.—EMILE.

sively, as demonstrated truths, the results of a bad system of statistics, even when these results are diametrically opposed to the most vulgar facts.

Do you wish examples? I shall have little difficulty in choosing them. Forget not that continued fever or the typhoid affection comprises all those fevers which you and I have called inflammatory, bilious, nervous, etc., and listen to these aphorisms of numerical medicine.

“Continued fever (the typhoid affection) is never observed in persons beyond the age of forty years.”

“It attacks a person only once during life. . . . Immunity is acquired by a previous attack.”*

“It is never of shorter duration than 14 days.”

“It is contagious, at least in the provinces.”†

My pen falls from my hand when I have to transcribe such matter, and there is not a little of it in the book of which I am now speaking!

If this book was the work of an obscure author without authority, it would not merit the honours of serious criticism. But the author is physician to Hôtel-Dieu of Paris, and physician-in-chief of epidemics for the department of the Seine. His work, imposing from its size, and its grave and scientific form, is recognized by the professors of the faculty as a model!‡ They wish to make it a classic; and yet (I say it with sincere and profound conviction) I know of no more dangerous work for young physicians, of none more calculated to paralyze their intellects, to falsify all their ideas, to lead them egregiously astray, and to conduct them to the antipodes of the true point of view for medical observation.

In conclusion, this work may be considered as the last expedient, the last doctrinal shift of the anatomical or materialist school. Under this aspect also the *Revue Médicale* was bound to examine it. This duty has been too long deferred; I thank you for having reminded me of it.

Accept, etc.

CAYOL.”

Some time after the publication of this letter, Dr. Sandras read to the medical society of Paris, a long memoir with the following title:

* *Op. cit.* Tome II., page 116, 516, et alibi passim.

† *Ibid.*, page 371.

‡ *Lessons on clinical medicine at Hôtel-Dieu*, by M. Chomel. 1 vol. in-8. page 2.

*Reflections upon the cases of typhoid fever observed at Hôtel-Dieu (annexe.)** I could not desire anything more opportune than the essay of this distinguished physician, to justify my assertion that the unfortunate name of typhoid fever, applied to continued fevers indiscriminately, only characterizes the confusion of ideas and the want of a medical doctrine. If any of my readers doubt this, let them read the conscientious work of M. Sandras; they will see how a man of science and talent, once involved in a false system, continually sees the truth through the barriers which prevent him from attaining it. In his reflections upon the present constitution of diseases, M. Sandras regrets *those enlarged views of the father of medicine*, which are now no longer regarded, and he feels himself attracted to the side of the Hippocratic or traditional school: Why does he resist this impulse? Has he good reasons for doing so? He does not say, and his silence recalls the naïve avowal of the poet: *Video meliora, proboque, deteriora sequor*. Behold him thus fallen from the heights of Hippocratism into the bottomless abyss of typhoidism! But he is beset with new perplexities. Having described all the symptoms of the disease, and all the organic alterations revealed by dissection, he naturally asks (page 65) *what typhoid fever is, and whether it is really a special disease?* He vainly seeks its specific character in its symptoms and progress; he seeks it, with equal want of success, in the cadaveric lesions; for he is obliged to confess that, *even in an anatomical point of view the disease is far from being always identical*. Finally, he declares with admirable frankness, that *everything justifies us in doubting the specific nature of typhoid disease*. You imagine after this that the author will abandon the system of typhoid fever? Not at all; he clings to it closer than ever. And why? *Because, he says, amid all these doubts, I feel myself to be entirely a man of our day and epoch.* . . . Oh, indeed! if it is necessary, in order to be a man of our day and epoch, to sacrifice one's reason, and render allegiance to systems which are false in theory and dangerous in practice, I avow for my own part, I should prefer to belong to another century and another epoch. But this is a matter of taste. It suffices me to show by this example, how powerful in our schools is still the influence of rationalist and materialist prejudices, since men of learning and experience are unable to disen-
thral themselves from it.

It is time to make way with the shapeless remains of the materialist

* This memoir was published in the *Revue Médicale*, Jan. and Feb. 1845.

school which still encumber the field of medical observation. It is time to hand over that pretended science to the incorruptible judgment of common sense, and it suffices to translate it into common language to make its absurdity manifest to the simplest intellect.

There is scarcely a person in the world who has not had in his life an attack of fever, or at least a febrile movement. This is all that is required to understand what I am about to say.

We wish to know what fever is. Let us first lay down some facts taught by common sense or by our consciousness.

1. Every one knows from his own experience, that a multitude of external causes affect us each moment of our lives: cold and heat, and sudden transitions from one to the other, the dryness, humidity and electric condition of the atmosphere, foetid and deleterious exhalations, and all sorts of physical and moral influences, etc., etc.

2. Every one feels that we possess a power of resistance, and that this resistance is *active*, that is *vital*, and not passive and inert like the resistance of the stone to the hammer.

An active resistance is a reaction: it is impossible to give it any other name. Active resistance and reaction are perfectly synonymous.

Hence the living body opposes an active resistance to whatever affects it, in other words, it reacts against these things.

3. Every one *feels* that vital resistance has very variable limits; that not only is it of unequal power in different individuals, but that it is stronger or weaker in the same individual, according to circumstances. The most ignorant person is perfectly aware that he is better able to resist heat and cold, and all the vicissitudes of the season, after he has breakfasted well than when he is hungry; when he is gay than when he is sad.

As long as the living body is affected only in a degree proportionate to its powers of resistance, there is normal reaction, and the health is not disturbed. But if the causes which influence it act with an intensity greater than the normal power of resistance, there is an abnormal reaction, that is to say, disease. A man is walking when the temperature is at 40°; suddenly the cold becomes still more intense, and the man is taken with fever. There is at first a shivering, which characterizes the momentary depression of the vital powers, and then a burning heat, with all the accompanying phenomena of violent reaction.

Such are the primary and elementary facts revealed by medical observation ; I arrange them in the following propositions, which lead logically to a definition of fever :

Every living body is endowed during a certain period, with the faculty of providing for its own preservation, of opposing by active resistance all destructive agents, and of incessantly repairing its losses.

This faculty, peculiar and inherent in organized bodies, is the result of a peculiar force presiding over all the phenomena of life, which we name consequently, *vital force*. But as this force is manifested only by the action of organs, whenever we consider it in a state of activity, we call it *the organism*.

Life, considered in its material phenomena alone, consists in a struggle or reaction of the organism against all the injurious influences of the exterior world, which ceaselessly affect it, and tend to alter its condition.

Independently of this continual struggle or reaction of the organism, which does not disturb the harmony of its functions, accidental or abnormal reactions are provoked by all accidental disturbing causes, by all the causes of disease.

Every disease then is an accidental reaction of the organism against an accidental disturbing cause.

The intensity and the kind of reaction vary according to an infinitude of circumstances relating to the nature of the morbid cause, to idiosyncrasies, and to external influences.

When the reaction is acute, that is prompt, violent, accompanied by an exaltation of the animal heat and of the sensibility, it takes the name of fever : Therefore,

*Fever is a general reaction of the organism, accompanied with exaltation of the animal heat, and of the sensibility.**

The good sense of the simplest peasant suffices to comprehend this definition of fever. One conceives and *feels* that fever is a *vital act*, an act provoked by some cause, that is a *reaction* : this is one of those intuitive truths which exclude all demonstration.

Ah well ! intellects paralyzed by materialist views are incapable of apprehending such simple truths. An *act*, a *power*, are not material things, and are consequently quite inappreciable to these intellects.

What is *vital force* or *life* ? for these two expressions signify precisely the same thing. The reply of the vitalist or spiritualist physi-

* *Est igitur febris molimen vitæ conantis mortem depellere.*—STOLL.

cian is plain : vital force is a law of creation, the law of organized beings, just as gravitation is the law of inert and inorganic matter.

The question is more embarrassing for the materialist; he knows not what life is, he only hopes to do so some day. Imbued with the false belief that the reason of its existence, and the rules which govern it, are inherent in matter itself, and that by analyzing matter they will learn its secret, he hopes to discover in the texture of our organs, and in their molecular alterations, the cause of vital movements in health and disease. Vain hope! the most subtle and laborious researches upon organized matter reveal nothing of the *wherefore* of life, just as the most pertinacious study of inorganic matter leaves us in complete ignorance of the cause of gravitation.

When we have subjected the cadaver to every mode of exploration, dissection and analysis, we are well acquainted with the organs or instruments of the different functions of life, and the material conditions requisite for the proper exercise of these functions; we have before us all the parts of which the animal machine is composed, but we know nothing of the motive power of that admirable mechanism; if we endeavour by the same methods, to learn the proximate causes of diseases, we shall only by post-mortem examinations discover their effects.

We are then forced to admit that both organic and inorganic matter are subjected to laws, which are not inherent in them, and the cause of which must always be hidden, unless, following the example of illustrious geniuses like Pascal and Newton, we look to an intelligent first cause, that is a creative Deity and Supreme Legislator. This is applicable not only to medical science, but to all science. The aim of science is to point out the laws of the universe; it does not attempt to account for these laws.

The philosopher Montaigne has said with deep meaning that we know *the why* of nothing (*le pourquoi de rien*.)

Every physical or natural science possesses two orders of facts: the one *material*, which we discover by the senses, and which concern beings considered in themselves; the other *intellectual*, which we perceive with the eyes of the understanding only, and which express the relations of beings, or in other terms, the laws of nature. The true philosopher appreciates and coördinates these two orders of facts without ever confounding them; whilst materialist philosophism misunderstands the intellectual facts and arbitrarily subordinates them to material facts; like the traveller, who, wishing to learn the constitution and

laws of a country, studies about its productions and topography with minute attention.

These explanations were necessary in order to explain the respective positions of the materialist school and of our Hippocratic vitalism.

We have seen the materialists, instead of accepting the *vital force* as the primordial law of organization, wish not to take it into account until it has been explained by cadaveric researches.

From the same materialist prejudice, they seek the seat of fever in the dead body.

This word *seat* implies something palpable. Thus a wound, a tumour, or an eruption, has its seat on this or that portion of the body. But how a fever, which is an *action* of the organism, a provoked action, that is a *reaction*, how can it have a seat?

An act of the living organism is always a function, either normal or abnormal, which necessarily implies the existence of organs or instruments but not of a *seat*. To speak correctly, we should enquire not for the seat of a fever, but for its instruments or agents. The question thus proposed, the answer is very simple; it results naturally from the foregoing principles. Fever (general reaction of the organism) has as its agents or instruments the heart and the nervous centres. His own consciousness will teach any one who has a fever the truth of this proposition.

Therefore, to seek in the dead body the seat of fever, which is a purely vital act, is to act in direct opposition to common sense; and to adopt an hypothesis of sovereign absurdity.

From this absurd hypothesis have arisen the last two systems of localization of fever: *Broussaisism*, which located fever in the gastro-intestinal mucous membrane, and *typhoidism* which established its seat in the glands of Peyer.

By recalling the starting point of these two systems, their falsity and inanity are shown so clearly as to bring upon them the condemnation of the public.

Were it necessary to establish a comparison between the two, I should say that *Broussaisism*, though equally false, was much more useful and practical in its applications than typhoidism. In considering fever as an irritation of the gastro-intestinal mucous membrane, Broussais evidently mistook the effect for the cause, but he at least fixed his attention upon effects, which are not without importance and therapeutical value; whilst the *alteration of the elliptic patches of the small intes-*

tine, upon which typhoidism is based, is a fact in pathological anatomy which is utterly worthless, so far as practical medicine is concerned.

Broussaisism was at least a system of medicine; typhoidism is not.

What then is typhoidism upon ultimate analysis? It is, if I may be allowed the expression, the Extinguisher of medicine.

It will be seen from what precedes, that the materialist school has only made retrograde progress since the time of Broussais, and that it is now at its wit's end. I do not think that enough life remains in it to invent, after typhoidism, any new system of localization of fever.

This said, *let the dead bury their dead*, according to the energetic expression of Scripture, and let us return to the study of life, which should always be the principal object of medical science.

To define fever, as we have done, *a general reaction of the organism with exaltation of the sensibility and animal heat*, is to turn the back upon the corpse and to look upon the living body, reacting, according to the laws of its nature, upon the external things which affect it.

These influences are exceedingly numerous and various. They comprise not only heat and cold, the vicissitudes of seasons, and all physical and moral agencies which cause fever, but also deleterious principles which enter by absorption into the intimate structure of organs, circulate with the blood and vitiate it, and equally induce a general reaction of the organism; such are marsh and nosocomial miasms, putrid exhalations, viruses, poisons, contagions, and the unknown causes of epidemics. Lastly, all primarily local internal diseases, and all external surgical diseases, may likewise become causes of fever.

By considering the number and diversity of the causes of fever, guided by common sense alone, we comprehend in the first place, that all these causes do not affect the organism in the same manner nor in the same degree, and that the reactions which they produce should present many varieties in their character and degree of intensity. Here already a subject for serious study presents itself to the vitalist physician which is altogether practical; we are already far from the barren domain of typhoidism, and the elliptic patches of the small bowels.

But this is not all: fever, which both in principle and in its tendencies is a conservative effort of nature, is nevertheless a disease in itself, since it is an abnormal reaction of the organism.

Common sense, to which I continue to address myself, can follow me in a few farther explanations.

We already know that the agents or instruments of fever are the

heart and nervous centres, that is, the organic apparatus which are the most general, and upon which all the others depend.

The action of these organic systems cannot be exalted without a disturbance of the organism.

In the first place, an acceleration of the circulation, carried to a certain degree, cannot continue for any length of time without producing numerous causes of disorder.

The experiments of Duhamel and Chaussier, and many other physiologists, have demonstrated that the composition of the blood is modified, and that that fluid acquires irritant properties by the simple fact of an acceleration in the circulation. This alteration of the blood produces as a necessary consequence, an alteration of the fluids secreted, such as the bile, the gastric and pancreatic juices, etc. : these vitiated secretions furnish heterogeneous products, which are more or less deleterious, and the elimination or assimilation of which necessitates new efforts of the organism, superadded to the primary reaction.

Another important effect of the febrile turgescence and acceleration of the circulation, consists in the increased and abnormal impulsion of the blood in all the organs. This impulsion may be so great that each part of the body will receive, in a given time, five or six times more blood than is supplied to it in a state of health ; hence arise congestions and consecutive local inflammations, which so often complicate fever, and which affect particular organs according to individual idiosyncrasies or exterior circumstances.

Therefore, whatever may have been the cause of fever, even though it may have been aroused by a prick of the finger or any other external and accidental cause, if the patient is labouring under cerebral excitement, he has a chance of an inflammation of the brain. If his chest is irritable or delicate, a protraction of the febrile movement exposes him more particularly to inflammatory congestions of the chest, to pneumonia, pleurisy or catarrh. If his bowels are disordered by a too stimulating diet, or by former disease, fever will determine in his case partial or general inflammation of the gastro-intestinal mucous membrane, or inflammatory congestions in the parenchymatous viscera.

These examples are sufficient to give an idea of all the disorders which may be induced by a febrile acceleration of the circulation.

The abnormal reaction of the nervous centres, which always plays a more or less important part in the general reaction of the organism, is also in itself a cause of grave complications. The varied disorders of

innervation that are observed in the course of continued fever, manifested by all the shades of delirium, convulsions and paralysis, and by innumerable anomalies of function, may impress on these fevers a malignant or ataxic character which may baffle the most skillful physician.

Every one can see that these are not arbitrary deductions, and that they flow naturally from the principles already established.

The conclusion is that every continued fever is incessantly aggravated and complicated by its own effects, particularly if it is prolonged beyond seven or eight days.

Therefore in the early stage of a fever the physician should always judge of its grade, tendencies and character, in order to decide, in the first place, whether to interfere or not; for this is always the first question which the practical physician should ask himself.

If the fever is mild, and there is nothing either in external influences or in the constitution or antecedents of the patient, which render unfavourable complications probable, then there is reason to hope that the fever will cease of its own accord. In such a case, a wise and enlightened practitioner will abstain from all active treatment; he will confine himself to watching the course of the fever or to insisting upon repose, diet, diluent drinks, proper ventilation, etc.

If, on the contrary, the fever is intense, if the patient labours under predisposition to disease, especially if the fever has some analogy with some serious prevalent disease, there is no longer any doubt as to the propriety of interference; it is necessary to arrest at once, or at any rate to moderate, the progress of the fever.

Here the insufficiency, or rather the complete nullity of the materialist system for the treatment of fevers, appears in the most glaring light.

When it is necessary to choose a medication calculated to arrest the progress of a fever, it is of very little moment whether there is alteration of the glands of Peyer or not. For these local lesions, when they exist, are not the causes but the effects of fever. And even did they precede the fever nothing could be inferred from that fact as to the treatment.

Bloodletting, purgatives, opium and quinia are the four remedies ~~which are~~ justly called heroic, and upon which the therapeutics of fe-

~~ver are based.~~ If we reflect upon the effects of each of these remedies, ~~unhesitatingly~~ that they affect, not local lesions, but

general dispositions of the organism, upon which local affections depend.

Although the general reaction of the organism (or fever) has the two most general systems of the economy as its agents, observation teaches us that these two systems have not always an equal part in the general reaction.

In a continued fever, when an attentive examination, not only of the symptoms present, but of all the circumstances of the disease, of the patient's constitution, and of the character of prevalent affections, has demonstrated that the reaction of the circulatory system is predominant, we call the fever inflammatory, and we treat it by bloodletting, whatever may be the local affections which complicate it.

When we recognize, from the same data, that the nervous system is chiefly interested in the reaction, we denominate the fever *nervous*, *malignant* or *ataxic*, according to its degree of intensity, and we treat it by opium, or its succedanea, if it is continued, or by quinia if it is intermittent or remittent; or else, according to circumstances, by a combination of these two remedies with others calculated to affect the nervous system, such as baths, cold affusions, ice, etc.

Besides the nervous and circulatory systems, other less important organic apparatus may sometimes be so greatly involved in the febrile reaction as to deserve to characterize or give a name to the fever. This is the reason why fevers in which the most essential character is an abnormal secretion of the bile, are called *bilious*, and why others characterized by an abnormal secretion of the mucous crypts or follicles of the bowels, are denominated *mucous*: these names being the more readily adopted inasmuch as they indicate the principal plan of treatment.

Calling a fever *inflammatory*, *nervous*, *bilious* or *mucous*, is not equivalent to asserting that nothing is to be done but to bleed, to purge, to give opium or quinia from the beginning to the end. The vitalist physician is not, like the empiric, the slave of routine. He knows that fever is a vital act, modified every movement by a thousand circumstances, and he always holds himself in readiness to fulfil the indications which present themselves. An example will make my meaning more clearly understood.

Suppose a well-characterized intense bilious fever. Whether the causes, symptoms, or the succession of pathological phenomena are examined, the conclusion is the same, viz: that the true origin or start-

ing point of the fever was an affection of the liver, giving rise to an abnormal secretion of bile. This abnormal bile, (abnormal either in quantity or quality, or in both respects,) poured into the intestinal canal, has provoked a more or less energetic reaction on the part of that organ. Now, what is to be done to effect a cure? If we interrogate nature, she will reply by placing before our eyes fevers of this same kind which terminate spontaneously by bilious vomiting and dejections of the same nature. These vomitings and dejections are not the disease, then, but an effect of the reaction. This reaction will cease, it appears, when it has no longer an object, when it has eliminated the irritant liquids, or the morbid principles. We second nature, therefore, by assisting these efforts at reaction by emetics and purgatives, whereby they are insufficient to operate the elimination of the morbid cause.

When, on the contrary, these efforts at reaction are excessive, and threaten to become injurious, we are careful not to excite them, and act in quite a different manner. In such a case, although we may have named the disease *bilious fever*, we do not hesitate to bleed generally or locally, according as we find reaction of the heart, or simply of the vascular system of some one organ, and we modify our first diagnosis, and style the disease *inflammatory bilious fever*. Or else, if there is excessive reaction of the nervous system, as in cholera-morbus, we use opium, or some analogous remedy, and denominate the affection *nervous bilious fever*.

The diagnosis of the vitalist is not as inflexible as that of the typhoidian physician; on the contrary, it is as varying, as pliant, as changing, as the vital acts it is intended to characterize.

As to the local affections which may complicate these fevers, we do not fail to consider them, both with reference to the prognosis and to the treatment; and in this respect we have a great advantage over the ancients, on account of the light which pathological anatomy and new modes of exploration, have thrown on this subject.

In the four varieties of fever which I have just enumerated, there is almost always excessive reaction.

There are others in which reaction is disproportioned to the gravity of the deleterious principles which affect the organism: such are the putrid or adynamic fevers, including the typhus of camps and jails, and the adeno-nervous fever, or plague.

I shall not enter into any detail in regard to these two orders of fever. I only enumerate them here, in order to complete the six orders of fever of PINEL, and to glorify the memory of that great physician, that illustrious nosographer, whose European renown shed such brilliant lustre upon French medicine at the commencement of the present century.

Pinel's classification of fevers, the result of long experience and profound study, was founded upon a learned analysis of the observations of the greatest *epidemic* physicians of every age. It is philosophical and practical at the same time.

When we reflect that this lofty medical conception has been excluded without any motive, and contrary to all reason, from the present system of instruction; and that the stupid system of typhoidism is substituted for this work of genius, we can scarcely comprehend such strange aberrations in men's minds.

Happily false systems pass away, and truth has its unalienable rights. As long as there exist physicians who devote themselves to the treatment and cure of disease, there will be inflammatory, nervous, bilious, mucous, putrid or adynamic, and pestilential fevers.

It must not be supposed, however, that these names are the only ones which the practitioner may adopt to characterize fevers which come under his observation.

A variety of circumstances may serve to denominate and characterize a fever. Sometimes there is a specific cause, which will recall better than any other circumstance, the nature of the disease, and the appropriate treatment (*miasmatic fever, nosocomial, worm fever, etc.*) Sometimes this is indicated by the progress and tendencies of the fever (*pernicious fever*); at other times by the predominance of one or several symptoms which connect the fever with some other, the character of which is well determined, the type of which has been furnished by some epidemic (*comatose fever, choleric, petechial, and miliary fever, etc.*). Lastly, the local affections which complicate a fever may have sufficient importance to give it a name, *e. g.*, *cerebral fever, erysipelatous, arthritic, and catarrhal fevers, etc.*

It is by this extensive system of naming fevers, that we reunite the chain of tradition, and reopen to youth the ancient books which materialist systems have completely closed to it. At the same time, we do not neglect to profit by the labours of our cotemporaries, by all the discoveries, all the anatomical, physical and chemical facts which mod-

ern science has revealed; but we make these facts subordinate to the observation of the laws of life, the only true foundation of the science of man, and of the medical art.

Such is the way of progress for practical medicine. It is the path which the *Revue Médicale* has always trodden, fortified by the approbation of all sensible and experienced men who have followed the progress of science without becoming involved with the systems of the day.

The time has come for all independent physicians to break openly with these false systems, and to rally around the standard of Hippocratic or traditional medicine. This is the only way in which the mortality of acute affections, a mortality which becomes more frightful every day, can be abated.

Typhoidism has felt the need of modifying itself for some time, but in form only, not in reality, and not with much benefit to the patients. It has been compelled to recognize the absurdity of considering as one and the same disease, fevers differing not only in their characteristic physiognomy, but also in their causes, symptoms and curative indications. Unwilling however to contradict itself too bluntly, it has devised the plan of presenting the fundamental characters of the different orders of fever as simple varieties of form. Therefore we now hear of typhoid fever of inflammatory, bilious, or adynamic form.

A single reflection will suffice to place this false conversion to vitalist doctrines in its true light. If these differences, which are so well marked, and so important as regards the treatment of fevers, are only forms or appearances, what then is the foundation or basis of these various forms? It is *typhism*. Very well. And typhism, what is that? For the pure typhoidian, it is the alteration of the elliptic patches of the small intestine. We know already the value of this anatomical fact. According to other typhoidians, who pretend to be progressive, typhism consists in the whitish or opaline caseous exudation of the gums, the violet or indigo hue of leech-bites.* I shall not stop to discuss this singular definition of *typhism*. I will only say that this appearance of the gums and of leech-bites, do not exist in all inflammatory or bilious fevers by any means. When, therefore, these signs of typhism are wanting, how are these fevers to be denominated? Let us stop here; there is no longer any ground for discussion.

* *Nouvelle méthode de traitement des fièvres typhoïdes*, par le docteur Ranque, professeur de clinique à l'Hôtel-Dieu d'Orléans. Paris. 1849.

As it is natural enough that more importance should be attached to the *thing* than to the form, it is easy to conceive that typhoidians, even the most enlightened, are not yet prepared for the treatment of fevers.

Let us hope that the form will end by carrying the thing with it, and that we shall witness the destruction of this wretched typhoidism, which every day sacrifices so many victims.

Must we say what, alas! will retard this conversion? It is the existence of a large number of ponderous volumes which garnish the shelves of the library, and which their owners dislike to send to the grocers.

Who does not recall, in this connection, the ingenuous conversation of Gil Blas with Dr. Sangrado, who was a *medical celebrity of the epoch* at Valladolid?

GILBLAS.—“Monsieur, j’atteste ici le ciel que je suis exactement votre méthode. Cependant tous mes malades vont en l’autre monde : on dirait qu’ils prennent plaisir à mourir pour discréditer notre médecine. J’en ai rencontré aujourd’hui deux qu’on portait en terre.”

LE DOCTEUR.—“Mon enfant, je pourrais te dire à peu près la même chose : je n’ai pas souvent la satisfaction de guérir les personnes qui tombent entre mes mains ; et si je n’étais pas aussi sûr de mes principes que je le suis, je croirais mes remèdes contraires à presque toutes les maladies que je traite.”

GILBLAS.—“Si vous m’en voulez croire, Monsieur, nous changerons de pratique. Donnons, par curiosité, des préparations chimiques à nos malades : le pis qu’il en puisse arriver, c’est qu’elles produisent le même effet que notre eau chaude et nos saignées.”

LE DOCTEUR.—“Je ferais volontiers cet essai si cela ne tirait point à conséquence ; mais j’ai publié un livre où je vante la fréquente saignée et l’usage de la boisson. Veux-tu que j’aie à décrier mon ouvrage ?”*

* GIL BLAS.—Sir, I call Heaven to witness that I follow your method exactly. Notwithstanding all my patients go to the other world : one would think that they took pleasure in dying in order to bring discredit upon our practice. I have encountered two to-day that they were carrying to the grave.

THE DOCTOR.—My child, I could tell you almost the same thing : I have not often the satisfaction of curing the persons who fall into my hands ; and if I were not as sure of my principles as I am, I should believe my remedies were unadapted to nearly all of the diseases which I treat.

GIL BLAS.—If you will take my advice, Sir, we will change our practice. Let us give, by way of experiment, chemical preparations to our patients ; the worst that

can come of it will be that they will produce the same effect as our bleeding and warm water.

THE DOCTOR.—I would willingly make this trial if it were not for the inferences that might be drawn from it; but I have published a book, in which I vaunt the effects of frequent bloodletting and of drinks. Do you wish that I should cry down my own work?

ART. II.—*On the Treatment of Affections of the Lacrymal Sac, by Cauterization and Occlusion of the Natural Passages.* By WILLIAM H. BERRY, M. D., of Washington, D. C.

Diseases of the lacrymal passages are at all times subjects of painful interest to the ophthalmic surgeon, for experience has demonstrated that the various methods proposed for their cure are inefficient and often dangerous. The present article is submitted to the profession in consequence of the author having witnessed, for some time past, the success of a mode of treatment applicable to a large number of cases in which disease of these organs exists.

Epiphora, the first symptom of any derangement of the proper function of the lacrymal apparatus, is often unnoticed, and it is only when the symptoms of the second stage of fistula lacrymalis commence, such as inflammation, suppuration, diminution of the antero-posterior and vertical diameters of the sac, consequent stricture, etc., that the surgeon is called upon for relief. The third and last degree, or inflammation of the periosteum lining the walls of the sac, and consequent disease of the unguiform and lacrymal bones, is that to which the treatment we are about to describe was first addressed, but experience has since proved it to be applicable to all other cases that are rebellious to the usual modes of treatment.

M. Desmarres, investigating the pathology of this disease, found that in a great majority of cases it ran a rapid course, and soon produced more or less alteration of the osseous wall. Being aware of the efficacy of the actual canter in affections of bone generally, he was led to use this remedy in these cases. At first the utmost caution was employed not to obliterate the sac entirely, in order to avoid the constant epiphora which would ensue. Fortunately, the effect of the remedy was to obliterate the sac completely, and at the same time to cure the

disease promptly, without any unpleasant results. The first case was followed by numerous others with like success, and finally the operation was applied to cases that had not yielded to the ordinary plans of treatment. M. Desmarres proceeds with the operation by laying open the sac by an incision commencing at its superior extremity, and then descending for the distance of three-fourths of an inch ; this incision is made without regard to the tendon of the orbicular muscle, its section not permanently interfering with its functions. The lips of this wound are held apart by a pair of delicate hooks, to prevent the action of the cautery upon the integument. The cautery used is of an olive shape. It is rapidly passed from one extremity of the sac to the other, cauterizing the entire surface. The wound usually heals, with slight suppuration, in the course of a few days.

When we compare the tedious and ineffectual results of other methods of treatment with the simplicity and efficiency of the one that we advocate, we doubt not its approval by the Profession in this country.

The question naturally arises, What becomes of the tears? The original seat of disease is most commonly in the ducts themselves, but it frequently originates in the sac. We destroy the sac to remedy this evil. It seems strange that this result should occur, but hundreds of successful cases have established the fact. Is there a sort of compromise between the lacrymal gland and its sac? We see numerous other physiological modifications that are equally inexplicable.

M. Malgaigne says :* The conjunctiva is moistened by a mixed liquid, composed of the mucus that it secretes itself, of the humour of the meibomian glands, but chiefly, according to the generally received opinion, of the liquid furnished by the lacrymal gland. The anatomists of the last century attributed also a large part to the transudation of the aqueous humour through the cornea : but this theory, advanced without proof, has been rejected. In accordance with this doctrine, it was regarded as indispensable that when the lacrymal gland was removed, the eye should be exercised also ; they supposed it unable to fulfil its functions without this auxiliary ; and reciprocally, the removal of the eye ought to be followed by the removal of the gland, to prevent the consequent epiphora. Practice has rectified these precepts : now we know very well that the extirpation of the lacrymal gland does not interfere with the proper functions of the eye, nor in the excision of the eye is it necessary to remove the gland : but we must explain these

* *Anatomie Chirurgicale*, tome I., page 388.

facts, so opposed to the physiological theory. Janin investigated this question to a considerable extent. We shall throw aside his hypotheses, and examine his experiments: If we turn up the superior palpebra of an individual in perfect health, and after having wiped it with a piece of fine linen, we examine it with a lens, we see transude by the pores of the conjunctiva small drops, which, enlarging little by little, end by forming a stratum of liquid. Wiping this off, the secretion continues, limpid, viscous and saline as the ordinary tears; and if we allow the palpebra to remain upturned twenty or twenty-five minutes, the flow of liquid increases to such a degree that it falls by drops, with as much rapidity as when one cries bitterly.

It can be objected to this experiment, that the liquid comes from the excretory ducts of the gland, although they are concentrated in the superior and external part of the palpebra; but Janin obtained a similar secretion from the lower lid. Turn down the inferior palpebra; cause the axis of the eye to be directed upwards to give more prominence to the conjunctiva; even place between this tunic and the globe of the eye a layer of lint, to prevent the tears from falling upon that portion of the conjunctiva subjected to examination; wipe this with a fine linen, and we shall see the drops of liquid produced in as great quantity as upon the upper lid.

Finally, upon a living animal this experimenter separated the lids by means of a speculum, and wiped the ocular conjunctiva with a piece of linen; it furnished a secretion entirely similar to that of the palpebral conjunctiva; and in repeating the same experiment upon the cornea, he obtained the same results.* In presence of these facts we must acknowledge that the conjunctiva and even the cornea go a great way in furnishing the liquid destined to lubricate the eye; and if we add that they are sufficient to preserve to the eye its moisture, and to polish it after the removal of the degenerated lacrymal gland, we are truly tempted to ask what is the use of this gland? If we can admit it as a useful auxiliary to the conjunctiva, its necessity is at least for the future doubtful; and we can conceive how the cutaneous degeneration of the conjunctiva and cornea produce that morbid dryness of the globe, designated under the name of xerophthalmia.

Again, with regard to the mechanism of the excretion of the tears, Janin performed the following experiment. He placed around the eye a wine glass intercepting all communication between the conjunctiva

* Janin. *Mémoire sur les voies lacrymales.*

and the external air; soon a light vapor obscured the internal face of the glass, and at the end of a half hour, he collected a little over one-third of a drachm, which would make two drachms every three hours, and two ounces every twenty-four hours. In regarding the results of these experiments, the first of which proves the comparative inutility of the lacrymal gland, the second the quantity of tears which pass off by evaporation, might not the absence of epiphora after the entire destruction of the sac be owing to some compromise, to some balance of function between the quantity excreted and that passed off by evaporation. Explain this as we may, the fact exists that after complete destruction of the sac, the disease entirely disappears.

The length to which this article has already extended prevents us from reporting fully the notes of several cases treated as we propose.

The first two cases which we shall briefly relate, are somewhat remarkable from the period of life at which they occurred, it being rare to find disease of the lacrymal sac before puberty.

CASE I.—A boy, æt. 8 years, applied 2nd Feb. 1852, to M. Desmarres, affected with fistula lacrymalis on the left side, syphilitic antecedents, (congenital.) Exostosis of the superior border of the lacrymal, where it articulates with the frontal bone. Treatment: Hydrag. proto iod., potass. iod., ferri iod., successively. The continued administration of these remedies was followed by the disappearance of all the specific symptoms excepting the exostosis. The usual local treatment proved ineffectual—the application of the cautery was followed by a successful result.

CASE II.—Child, æt. 10 years, applied for treatment on the 10th Feb. 1852. Lacrymal tumour, right, resulting from inflammation of the pituitary membrane, extending to the sac. The case resisted the usual modes of medical and surgical treatment. M. Desmarres decided upon the cautery, which was effectual.

We have the notes of four females operated upon on the same day. In one, the disease dated fifteen years back, and both eyes were implicated; caries of the bone existed, which was recognizable by the simple touch through the tissues; the probe passed through the ducts also gave the usual impression observed in diseased bones elsewhere when probed. The cautery in this case was applied twice with happy results. The other three cases yielded to a single application.

We do not advocate the cautery as a *sine qua non* in lacrymal disease; there are cases depending upon a simple obstruction of the lacrymal canals which yield readily to catheterism as advised by Anel. It is un-

necessary to make an *exposé* here of the ridiculous disproportion of the canulæ of Dupuytren and the nasal canal, the former being from 8 to 14 lines, while the length of the latter averages but 5. Under these circumstances it is not surprising that the floor of the nares should be so frequently perforated. We have all witnessed the unhappy results of the treatment by dilatation *à demeure* : the canula becomes imbedded in the bony wall of the canal and its inferior extremity projects into the cavity of the mouth. In view of the insuccess of other modes of treatment, the unhappy results frequently arising therefrom, their entire failure to ameliorate the condition of the patient in many cases, in others, where the alteration of the bones exists, their *utter uselessness*, what prevents the simple and effective treatment by the cautery?

ART. III.—*On the Present Condition of the Medical Profession in Virginia.* By JAMES B. McCAW, M. D., of Richmond, Va.

The medical profession in Virginia has been for years and is now, remarkable for its numerical force, as well as for the respectability and influential position of its members. For fifty or sixty years past the young Virginians of good and respectable, and often wealthy, parentage, have been thronging the halls of the northern medical colleges in such numbers as to make the "Virginia doctor" a well known name and a marked character even on those thickly populated and busy streets. Generally speaking, the medical students have been furnished with a good general, if not a collegiate, education; and have always been, both by birth, manner, and gentleman-like bearing, greatly the superior of those students coming from the northern states. They have pressed forward by hundreds in eager pursuit of that precious parchment which was to be their passport to that land of Canaan they so much longed for, but which when won, was found to have for many of them, precious little of milk and honey in it; for so crowded have been their ranks, that many were unavoidably doomed to disappointment; and those who did succeed, have found, as a general rule, a lifetime of hard labour and heavy mental and moral responsibility but ill rewarded. Still, learning

nothing by the experience of those gone before them, our young men are rushing on in increasing numbers, in pursuit of the doctorate, until it is estimated that last year there were from Virginia alone, 500 students of medicine in our own and the northern colleges; and it may also be safely asserted that there are at this time 2000 graduates in the State.

One would suppose that a body of men so numerous, so respectable for its education, wealth, and personal influence, so useful and charitable to the sick and needy, so indispensable to every man, woman and child in the commonwealth, would hold before the public the most exalted professional position; that their influence through the public, upon our legislatures, would always enable them to obtain any thing in itself right at their hands which they might desire. But, alas! it is not so. Individually the medical man is most influential, but as a professional man he has no influence; loved and respected as he generally is by the people for his kindness and benevolence, he is underbid by the knave, he is out out-stripped by the quack, he is ignored by the State, which only knows him to tax him, and that illegally and unconstitutionally, and which only bases his claims to practice physic upon the fact that he says he would like to practice, and grants to all who demand it a license to tamper with the most difficult of all sciences; even, as is the case in this city, giving to the master of a slave a license permitting that slave to practice medicine upon any of the good people of the commonwealth who may desire his services, and thereby placing him, as far as the State is concerned, upon the same footing with the man who has spent time, wealth, and talents in trying to fit himself for the arduous and difficult duties of his calling.

One reason why this lamentable state of things exists, is that, our profession here has never had an organization of any sort, and has rushed on like an undisciplined horde instead of marching with discipline and good order. Each town and county has a different tariff of charges, and often every man charges his own price, until the public does not know what it is expected to pay, and so pays nothing. For thirty years we have had a State Medical Society, a chartered power, and yet even now after desperate efforts, we sometimes succeed in getting a quorum of 20 or 30 to attend its meetings in a city in which there are 100 resident members. Local societies too spring up now and then under the auspices of some one who desires to rescue his profession from this Slough of Despond, but nobody goes to the meetings, nobody

writes an essay, or reports a case, and soon the sickly plant withers and dies.

Another reason for this want of influence and professional power is, that we have no medical literature of our own, through which we can show to the public at home and abroad how much genius, learning, and cultivation there is lying dormant in our ranks. Who can tell the immense number of practical facts, important inferences, valuable theories, and successful experiments have been buried forever in the graves of our old medical worthies? Men who with brilliant and profound intellects, thorough and complete professional educations, have spent years of their lives in patient investigation and midnight watchings, and have died and made no sign. It is sad to relate that the first, and we might almost say the last book coming from a Virginia physician which made any impression on the public, was Dr. McClurg's "Essay on the Bile," published in 1772, now eighty years ago, which, from the originality of its experiments, and the elegance and vigour of its style, produced at that time a considerable sensation. A darkness like that of the middle ages has shrouded the profession from that time almost to the present, and if there has been an occasional sparkle or faint gleam of light, it has only served to show how deep was that gloom which enveloped and concealed the brilliant and precious ore beneath.

Have we a Medical Review, gotten up to try and remedy this state of things, it is not supported, it is not written for, it is not paid for! Month by month its gasp is fainter, its voice more feeble. Does it brighten up now and then? It is the flush of hectic, showing the decay within, or rather showing how much bad matter it contains. It dies of inanition, and its funeral pyre is made up of the unpaid subscription list, and the dull essays which have filled its sombre pages during its brief existence.

But the great, the vital cause of that general and long continued lethargy, remains to be spoken; it is because the fountain from which the student has drawn his knowledge has been a foreign not a domestic spring; because we have never had our alma mater in our midst, around which the old greyhead and the young student could rally—but have gone first to Edinburgh, and now to some northern institution, there to leave behind all those precious memories of college life, all those strong and never dying feelings of veneration and respect for professor, tutor, and clinical lecturer, which ought to have been kept carefully within our own precincts, and poured out on our own State institution, and our

own native teacher. We have wanted, and are wanting now more than ever, a great State medical college around and to the support of which the profession may cluster, to the honorary places in which the ambitious aspirant may look, hope and strive, and write, and struggle to gain the prize. Had such an institution existed, would we have been obliged to give up our Chapman, our Horner, our Gibson, to adorn the halls of a foreign institution and to sap the very life blood of the profession in their native State, and abstract from the pockets of Virginians millions to build up a foreign city? No; had such a college been in existence those bright and shining lights—and how many more might be named?—would have had their ambition gratified, their laudable aspirations realized at home; and those brilliant men who have done so much to build up the name and fame of those northern schools, and have thus proven that the profession in Virginia has ever been able to take its position in the front rank,—such men would have been so many buttresses to strengthen, adorn and support the Virginia medical temple. But how can the public have respect for a class of men who have no respect for themselves; who, educated themselves at a northern college, send their sons and pupils to their own old mother, step-mother though she was, instead of letting them suck their fill at the maternal breasts of a State college. The public, of course, follow the lead of the doctors. The doctors cannot be educated anywhere else than Philadelphia or New York, because there is nobody in poor old Virginia fit to teach them; so they go abroad to hear lectures delivered by Virginians who have been driven away from home for want of suitable objects upon which their ambition could fasten. When the public gets sick it says, I will go too to these all-healing and all-knowing Philadelphia doctors. And so Mrs. A and B go to get a pessary introduced, and Mr. C and D to undergo the operation for hydrocele, and Master E and F to have his eyes straightened or his tendons divided, and the fees and the reputation remain in foreign parts, and the college gets stronger and richer, and the prizes larger and more numerous, and men of power and mind cluster around, and the whole profession rises in estimation. Reviews and magazines, giving tone and united aims to the medical public, spring up and flourish, and the names of the great men supporting and contributing to them, are ringing in the ears of the people, and becoming familiar as household words. Alas! for the doctor at home—you hear nothing of him; his labors for years are passed over unheeded, and but grudgingly rewarded; his hopes and aspirations are blasted in the bud; his spirit

is broken, and he hacks along to try to make money enough to feed his children, and to enable him to send his boy to Philadelphia to study medicine.

It is true, we have had and have now, medical schools in the State. We have one or two small affairs, which are mere local and preparatory schools, and we have the medical department of the University of Virginia, and the medical department of Hampden Sidney College.

The University medical school as far as it goes, is an admirable one; its method of teaching is thorough, and the course being a long one, its pupils have deservedly obtained the reputation of being well prepared in the theory of their profession. It is, in fact, if we may use the expression, a very useful and valuable grammar school in medicine, where the student is well grounded in the rudiments and the theory of his profession, but which, from its inland position, and its inability to give its students any practical insight into disease, any bed-side instruction, or hospital advantages, must ever be regarded as a preparatory school. In truth, the distinguished founder of the University never intended to give to the medical branch of that institution the right of granting the degree of M. D.; but only designed that there should be given to the candidate for A. M., at the same time that he was perfecting himself in all the other branches of learning, some general and adequate idea of his own complex system, and that a man should not be called master of arts, when he was ignorant of the simplest portion of his own frame. The idea was an admirable one, and it is a pity that there is not mingled with the thousand and one subjects taught at our colleges some sketch of anatomy and physiology sufficient to give an insight into mysteries of that fearful and wonderful piece of mechanism, which our State so recklessly commits to the hands of any one who substantiates his claim to scientific attainment by the payment of \$10 into her treasury. Such a general knowledge of medicine, diffused throughout the community, would make men more wary in their encouragement of old women, root doctors, and quacks of all sorts; and they would be glad to see some legislation, which would protect them from the appalling dangers of malpractice, and reckless trifling with disease and death.

The only other school to be considered is the medical department of Hampden Sidney college. This school holds the position to be made the great State school. It is situated in the metropolis of the State; it has ample opportunities, in that rapidly growing city, of giving to

its class a thorough insight into, not only the theoretical, but the practical part of medical science ; and it is accessible to all parts of the State. This school too has already done a good deal in diverting the current towards the northern schools, and has saved thousands to the State, even in its present restricted condition ; it has been moreover in the hands of men of talent, and without mentioning the names of those now living who fill its chairs, we might point with pride to the brilliant and eloquent Warner, one of its most active founders ; and if the opinion may be expressed by one who has no affiliation with, and never took a ticket in the college, the lectures of the late professor Dr. John Cullen, may be looked upon as fully equal in point of style, point, and practical and theoretical knowledge, to any delivered in any college in the Union.

These gentlemen too have, by their own unaided energy and perseverance, persuaded the legislature to open its purse string for the first time, to help the cause of medical education, and have 25 or 30,000 dollars invested in college building, infirmary, &c.

Why then has this institution not attracted to its lecture rooms the four or five hundred medical students from this State ? Why is it not the central medical power which has been spoken of ?

The answer to this is quickly given. This institution, conducted as it has been by men of talent and energy, has been always, from its beginning to the present time, a *private* enterprise, based on private means, and of necessity under the control of the faculty alone. True they succeeded in borrowing from the State a sum of money, but the State, at the time of lending the money, did not take any control over the institution, but left it under the guidance and direction of its professors. There the State was wrong ; she violated a fundamental principle of right when she lent money to a private copartnership, without changing it into a public institution. She has no business to lend the people's money to any body, whether chartered power, joint stock company, or college, without retaining over that money a perfect and entire control ; but here she lent her money, not to the trustees of Hampden Sidney, who were a chartered power, but to the faculty of the medical department, to do with it as they pleased. Far better would it have been for the faculty and institution itself, if the State *then* had said, we will give you the money necessary, but you must come under *our* jurisdiction ; if you are built up with national money, you must become a national college, governed not by a self-perpetuating faculty,

or a self-perpetuating board of trustees, (a mode of government which stinks in the nostrils of every republican,) but governed by a power which emanates from the State itself, upon whose bounty you live. Far better had this been done, for this very money has been at the bottom of the unfortunate quarrel between the trustees and faculty, which engaged the attention of the public for some time past. As long as the college was struggling into life, and manfully fighting for its very existence, there was no question of jurisdiction raised between professors and trustees; but as soon as the office became fat, and the instructorships and the patronage of the college worth something, than all of these disputes arose; and so unwary were the original founders of the connection between Hampden Sidney and its medical department, that the result of the quarrel is, that the two are at open war, the faculty refusing to acknowledge the unlimited right of appointment by the trustees, and the trustees maintaining that privilege. The result has been that the usefulness of the college for the time has been destroyed, and the faculty have no resource but to ask the State to do what she ought to have done years ago: to take them under her jurisdiction and control. Can the legislature refuse to found a new medical college based upon the present nucleus in the city of Richmond?

Let every physician who has the good of his profession at heart, exert his influence upon his representative, and rouse his attention to the importance of the question. Show to him that the \$30,000 already expended, is about to be wasted unless some action is taken; show to him that \$200,000 are annually drawn from the State, and spent in northern colleges; point out to him the brilliant success, about to be achieved by our State literary University, which is becoming not only the great Virginia school, but the great southern school of arts, numbering amongst its students young men from every southern State; and prove to him that a State medical school would do the same thing. Show to him how important it is that the southern medical student should be educated in the south, to be familiarized with the peculiar diseases of our climate, and the adaptation of remedies to the peculiar constitution of the negro; ask any sensible slave-owner, who is familiar with the disease, if he is willing to see his negro bled twice a day for pneumonia, when he will probably need sustaining and stimulant treatment to get him safely through. Let all these reasons be brought fully before him, and every intelligent representative must be willing to give a State organization to a medical college.

As to the best arrangement to be made, that may be safely left to the wisdom of our own legislators. The main thing is to make them think on the subject. The medical department of the university might be transferred to Richmond, and a coalition between the two schools thus produced. Let the long term of the university school (probably somewhat modified) be adopted. Make a faculty, numbering at least eight professors; appropriate money enough to purchase a museum, to enlarge the present college buildings, and to give to the institution every advantage. Let the governing power open the doors of the college wide, and be only actuated by the desire to fill its chairs with those who are worthy to hold its honours. Let them yearly appoint a board of medical examiners, to be present at the examinations of students for their degrees, and upon satisfactory evidence of their qualifications, to issue to them their license to practice physic. Let this be done, and what the university is in comparison with the other colleges of the State, which are in the hands of close corporations, and sectarian cliques, so would this medical college be, in comparison with any other institution in the hands of private parties or aristocratic boards. Such a college would in five years not only retain every Virginian within the State, but would attract from our southern states crowds of pupils. Then we would have our great names in medicine, of domestic manufacture, and our vassalage to the north would be at an end. Then the sick and afflicted would come to our own physicians and surgeons to have those things done for them, which they now think cannot be done any where else than at the north. Our reviews would be filled with able and well-studied matter, the offspring of minds ambitious not to be left behind in the race after distinction, and the whole medical profession would rise in the estimation of the public, and become what it is, the great conservator of the public health, the most important element (next to the preaching of the word of God) towards the advancement of the public weal, and the increase of the happiness and contentment of the people.

ART. IV.—*On Hæmorrhage from the Umbilicus in New-born Infants.* By GEORGE A. OTIS, M. D., of Richmond, Va.

When Underwood observed, in his treatise on the diseases of children, that hæmorrhage from the umbilicus was scarcely deserving of notice, he doubtless had in view the extreme rarity of this accident, for statistics prove its almost uniform fatality, and its consequent claims upon the attention of medical men.

Having recently encountered a fatal case of this affection in my own practice, I have thought it desirable to place it upon record, inasmuch as science possesses comparatively few facts of a similar nature. I propose at the same time to report several recent cases which have appeared in European journals, and to present a succinct account of the present state of our knowledge in relation to the nature and treatment of this disease.

Undoubtedly umbilical hæmorrhage is rare. In fact, classical works scarcely allude to it; the *Traité des Hémorrhagies* of Latour contains but a single example of it, a case due to Fabricius, and relating to an adult who had epistaxis at the same time. We might expect to find an account of the disease as it appears in infants in those works on obstetrics which treat also of children's diseases, but we have looked in vain in the principal treatises of this character for any information on the subject. The books specially devoted to the diseases of early infancy are equally silent. The affection is not mentioned by Dewees, Condie, Rilliet and Barthez, Meigs or Valleix; Churchill and West barely allude to it; even Billard, whose researches on the umbilical cord are so important, and who describes its dessication and separation accurately, fails to notice the occasional occurrence of hæmorrhage. Capuron describes the disease very imperfectly; Chailly and Baudelocque speak of it as of trivial moment. I may add, in proof of the rarity of umbilical hæmorrhage, that only one case of it has been observed at the Foundling Hospital of Paris during the last two years, although nearly ten thousand new-born infants have been admitted in this space of time.

Several interesting articles on this subject have been published in the medical periodicals of late years, but they have been generally, and necessarily, founded upon a small number of observations. We are

indebted to Dr. Homans for the details of seven cases;* Dr. Bowditch has recapitulated these and has added five others;† Mr. Ray, in an interesting paper read before the Medical Society of London,‡ furnishes twenty-five cases; but only one of these occurred in his own practice, and of the remainder, sixteen, derived from Copland, do not concern new-born infants exclusively, and therefore cannot be admitted into our present category. We may also mention the cases of Paul Dubois;§ those of Radford,|| and of Manley;¶ Dr. Cook's case,** and two reported by Dr. Marsh, of Albany;†† the last three cases were all complicated with jaundice, and proved fatal. Dr. F. Minot has furnished, in an highly instructive and interesting essay,‡‡ an analysis of forty-six cases of this disease, all of them idiopathic, most of them derived from sources which we have mentioned. This writer believes that the affection of which we are speaking, is more frequent than is generally supposed, and that our ignorance of it arises more from deficiency in observations than from its rarity. I believe, however, that the experience of Dr. West, who never witnessed a case of it among 16,276 children who came under his observation, together with the proofs which I have advanced, will suffice to show that this opinion is ill founded. Possibly Dr. Minot has been misled by a fact analogous to that which accounts for the exaggerations in regard to the fatal effects of chloroform; I refer to the various reports of identical cases. Thus, of the twelve cases of Dr. Bowditch, seven appertained to Dr. Homans; whilst sixteen of Mr. Ray's observations were due to Dr. Copland. A recent French writer has fallen into the error to which I allude, an error, it need scarcely be said, which of all others a statistician should avoid.

The cases of umbilical hæmorrhage observed in France, are summed up by M. Aimable Dubois, in an excellent inaugural thesis;§§ and M. Henri Roger,|||| of the Foundling Hospital, has written a most admirable

* See *Boston Medical and Surgical Journal*, July 11th, 1849.

† *American Journal of Medical Sciences*, January, 1850.

‡ *London Medical Gazette*, March, vol. xliii., 1849.

§ *Journal des connaissances medico-chirurgicales*, March, 1847.

|| *Edinburgh Medical and Surgical Journal*, July, 1832.

¶ *Medical Gazette*, vol. xlv., May, 1850.

** *New York Annalist*.

†† *New Jersey Medical Reporter*.

‡‡ See *American Journal of Medical Sciences*, October, 1852.

§§ *De l'hémorrhagie ombilicale*, Thèse de Paris, 1848. No. 241.

|||| *L'Union Médicale*, Tome vii. Nos. 35, 36, 37. March 24th, 26th, 29th, 1853.

memoir on the subject with a detailed account of the only case of the disease which has occurred in that institution in the last two years.

An examination of the German medical periodicals, which I regret my inability to make, would doubtless furnish other cases of this disease. The German writers on infantile pathology have not omitted to describe it. Dr. Roger states that Verson* devotes a page to it, which seems to be derived from Radford: and that Meissner† is still more explicit; he also mentions several German authors, Carus, Siebold, Schneider, etc., whose works may be consulted with advantage.

After numerous enquiries among those physicians most extensively engaged in the treatment of children's diseases in this city, I have learned of the occurrence of only a single case of idiopathic umbilical hæmorrhage in addition to the one which came under my observation.

The following are the details of the latter case, together with those of several others, derived from the thesis of M. Dubois, and the memoir of M. Roger.

CASE I.—On June 20th, 1853, I was summoned to see a male child, M——, born the 12th of the same month.

The child was small but well-formed. It was intensely jaundiced. I had never seen so deep a colouration of the surface. The icterus had appeared on the third day after birth; mercurials had been freely employed, and the dejections had temporarily exhibited a greenish hue, but for several days past they had assumed the colour and consistence of clay. The face was wrinkled, and wore an indescribable expression of sadness; the lips were pallid; there were ecchymoses on the tongue and palatine arch. The pulse was rapid and small; the skin cool. The voice was feeble; the respiration was natural, the vesicular murmur unaltered.

The little patient lay upon his nurse's lap in a torpid state; he refused to nurse, and made no effort of suction when the finger was introduced into the mouth. Milk had been given him by a spoon several times during the morning, but he had vomited shortly after, and the vomited matters in each case had been tinged with blood.

The child's mother was of good constitution; she had had a natural labour, without any unusual consecutive hæmorrhage.

The cord had fallen on the seventh day; there had been no subsequent ulceration or soreness.

At about four in the morning of the day of my visit, the nurse had observed blood oozing from the child's navel. Alum, acetate of lead, cold water, hat's fur, and other applications, had been employed by the family, but the hæmorrhage had not been arrested even momentarily.

* *Der Arzt am Krankenbette der Kinder*, Vienna, 1833.

† *Die Kinderkrankheiten*, etc., Leipzig, 1844. p. 290.

I arrived at two o'clock, (the parents of the child resided at a distance of several miles from the town) ten hours after the commencement of the hæmorrhage.

Three compresses of several thicknesses of linen had been completely saturated with blood. The quantity was estimated at nearly two ounces. The umbilical tubercle was prominent; in its centre was an orifice of about the diameter of a crow's quill, from which the blood welled up and rapidly formed large drops, which ran down the child's abdomen in a small stream. The blood was dark, with streaks in it of a more florid hue. It did not coagulate; neither were there any coagula about the compresses.

I pinched up the umbilical tubercle, and applied a large *serre-fine*, (little silver forceps invented by Vidal) which clasped together the lips of the orifice. The application appeared to give the child no pain, and it controlled the hæmorrhage completely. I ordered brandy, and sent to the city for some tincture of chloride of iron.

The child took a little nourishment, and afterwards went to sleep; there was no bleeding for more than four hours. At the expiration of this period, a movement of the patient displaced the *serre-fine*, and the bleeding recurred more freely than before. I endeavoured to replace the instrument, but could not succeed in again arresting the hæmorrhage by means of it. Compression was then employed, with the finger and with lint, and applications of ice, alum, matico and sulphate of copper; all of these appeared to increase the hæmorrhage. I then injected by means of an Anel's syringe, several drops of concentrated solution of perchloride of iron into the orifice, hoping to produce either the formation of a coagulum, or else such a corrugation or retraction in the vessel as would arrest the flow of blood. This operation was temporarily successful, but after a short interval the bleeding recommenced. I then cauterized the orifice with a stick of nitrate of silver, very reluctantly, for I feared the recurrence of the hæmorrhage from a fissured and ulcerated surface. The cauterization checked the hæmorrhage completely. I ordered muriated tincture of iron and paregoric in large doses, and as much nourishment as the child would take, and, after expressing the belief that the bleeding would return after the separation of the eschar formed by the caustic, I took my leave.

June 27th, 6 A. M. The little patient had slept part of the night. The iron, opium, and nourishment had been administered regularly. Two bloody dejections. Small purpuric spots on almost every portion of the surface. Pulse frequent and obliterated by the slightest pressure. There had been no bleeding until 4 o'clock in the morning, when the eschar separated; the blood oozed from the fissures around the navel, and from the ulcerated surface produced by the caustic; it did not flow as on the previous day; it was very pale, and did not coagulate.

I passed two needles through the skin at right angles to each other, and surrounded them with ligatures, as in hare-lip. A circle of integument three quarters of an inch in diameter was thus enclosed. No further hæmorrhage occurred. The child laid in a torpid state, gradu-

ally becoming colder and more feeble, and died eighteen hours after the last operation.

No autopsy was allowed.

Neither the parents or grandparents or any of the members of the family of this patient had manifested any tendency to the hæmorrhagic diathesis. The mother had not been subjected to any debilitating causes, nor had she been taking alkalies.

CASE II.—(Reported by Professor Paul Dubois, *loc. cit.*) A delicate male infant; separation of the cord on the fifth day; umbilical hæmorrhage on the eleventh day. Applications of ice arrested the bleeding temporarily; colophany, the *eau Brochieri*, compression with the finger and with spunk, and cauterization with the nitrate of silver were useless. The umbilical tubercle and the subjacent parts were ligated by transfixing them with a pin, on which a double thread was wrapped.

The eschar separated and cicatrization was perfect; but the child died five weeks afterward of purpura hæmorrhagica, (ecchymotic spots; blood from the anus, etc.)

Autopsy.—The umbilicus was healed completely. The left umbilical artery was entirely obliterated; the right presented little nodosities, one of which, when incised, furnished a little semi-liquid blood. Although the calibre of the vessel was diminished, a probe passed along its interior nearly to the ring. The umbilical tubercle, incised from the right side, exhibited an orifice of the size of the head of a pin, from whence the blood had probably flowed.

The vein was almost completely obliterated; it had, in many parts, the appearance of a fibrous cord.

The *ductus venosus* was impervious; the *ductus arteriosus* and the *foramen ovale* were not closed completely.

Ecchymoses were discovered on the tongue and palatine arch; there was blood in the stomach and large intestine; coagula were found between the arachnoid and the pia-mater, and in the plexus choroides. The lungs were exsanguined.

CASE III.—(M. Aimable Dubois, *Thesis*, p. 15, Observation of M. Pout.) A male infant, in whom the separation of the funis occurred on the sixth day, was taken on the eighth day after birth with profuse hæmorrhage from the umbilicus. Compression, by means of a tampon of lint with a retaining bandage, was unavailing, and death occurred in forty-eight hours.

Autopsy.—The umbilical arteries were permeable; the left contained a clot of blood, and appeared to have furnished the hæmorrhage; the vessels were so much retracted within the abdomen that compression could not possibly have been effectual.

The umbilical vein was full of liquid blood, and was almost as large as a goose quill.

CASE IV.—(Reported by Dr. Henri Roger, *loc. cit.*) June 15th, 1852, there entered the sick wards a little girl, Louise Lebas, who was

born the 3d of the same month, and had been brought on the 4th to the hospital.

This infant was small, but well-formed and active. The tongue was white and humid; the child sucks energetically. The previous evening there had been diarrhœa; the matters voided were green and glairy. There was erythema about the nates, but nothing peculiar in the appearance of the navel.

The pulse was very frequent, the skin cool. The respiration natural, the chest resonant. (Gum water with a drop of laudanum; two small enemata with one scruple of the extract of rhatany.)

The next day, June 16th, the face was pale and slightly wrinkled; the extremities were cold and blue; there was torpor; the diarrhœa continued. Auscultation detected a fine crepitus at the base of each lung. (Rice-water with wine; same injections.)

In the course of the day it was observed that there was hæmorrhage from the umbilicus; the blood issued slowly, dribbling away; it was not very dark coloured. About three fourths of an ounce of blood had been lost. Cauterization with the nitrate of silver, a tampon of agaric, and compression by a circular bandage, failed to control the hæmorrhage.

On the 17th, at the morning visit, the child was found enveloped in bloody cloths; the amount of blood might be estimated at an ounce and a half. When the child cried, the flow of blood augmented. The pallor was not much greater; the expression of the countenance was the same. The diarrhœa continued greenish and abundant.

Spunk sprinkled with alum was applied to the navel, and a girdle of adhesive plaster; the bleeding was arrested only temporarily however; twice during the morning the actual cautery was applied.

The hæmorrhage continued; in the evening, the child was found cold and pale, the pulse was insensible. We did not dare to undertake any operation on this already almost lifeless body. The patient died on the morning of the 18th.

Autopsy.—Twenty-six hours after death. The body is pallid; no emaciation; no complication of icterus; no putrefaction. We discovered no hæmorrhage either under the skin or in the internal organs; no metastatic abscess.

There was gelatiniform softening of the great curvature of the stomach. The intestinal canal was pale; no alteration of the follicular apparatus. The liver presented no appreciable lesion. The kidneys were rather pale; the spleen was small and deep coloured.

The lungs were slightly engorged posteriorly; the pleuræ and bronchi were healthy. There was a small quantity of serum in the pericardium. The heart was small, its cavities empty; the *foramen ovale* was nearly obliterated, the *ductus arteriosus* completely so.

There was a slight effusion of pus at the posterior and inferior portion of the cerebellum.

The umbilical vein was healthy. It was entirely obliterated by a clot. The umbilical arteries were pervious, dilated, and filled with semi-liquid blood. The internal surface of these vessels was blackish,

and, instead of being smooth, was wrinkled. The internal readily separated from the middle coat.

CASE V.—(Reported by M. Aimable Dubois. *Op. cit.*, p. 10.) A boy of good constitution, weighing six pounds. Fall of the cord on the seventh day; umbilical hæmorrhage on the eighth day; the blood flows freely, without impulse. In the middle of the umbilicus is an opening of the size of a quill. The navel is depressed; the bottom of the wound is granulated.

Pressure with the finger, lunar caustic, colophany and spunk only arrest the bleeding for a moment. Ligature *en masse* with two needles and a thread in figure of 8. In the evening, oozing; additional ligatures.

Five days after the operation the eschar fell, leaving an ulceration of the size of a quarter of a dollar. The hæmorrhage did not return, but obstinate vomiting came on, with tympanitis, diarrhœa, fever, and coma. Death occurred twelve days after the operation.

Autopsy.—The walls of the *ductus venosus* were collapsed. The *ductus arteriosus* and the *foramen ovale* were incompletely closed. The umbilical arteries formed white cords. A probe could be passed from the umbilicus into the umbilical vein. The tissues are exsanguined.

CASE VI.—(Reported by M. Thore. *Gazette Médicale*, March 11th, 1848.) A boy, 14 days old, was taken with umbilical hæmorrhage. At the same time there existed violet spots on the skin. The hæmorrhage was slight; the blood was serous.

Compression, powdered alum, and lunar caustic sufficed to control the hæmorrhage after six days. Subsequently there were hæmorrhages from the buccal and gastric mucous membranes, and purpuric spots on the dorsal region; then diarrhœa, stomatitis, and œdema came on, and the child died, twenty-four days after the commencement of the hæmorrhage.

Autopsy.—The umbilicus had almost cicatrized, but it still suppurated a little. The umbilical arteries, near the umbilicus, were filled with clots, pus, and fluid blood; they were permeable throughout their course. The vein was empty; its calibre was less than that of the arteries. The *foramen ovale* and the *ductus arteriosus* were not entirely obliterated. The lungs were pale; the tissues anæmic.

ETIOLOGY.—Children of the male sex manifest a marked predisposition to this disease. In more than two thirds of the cases in which the sex is recorded, the patients were males. This is in conformity with the observation of authors, that males are much more liable to the hæmorrhagic diathesis than females.*

It would appear that some inherited peculiarity occasionally predisposed children to this species of hæmorrhage. In a comparatively

* Miller. *Principles of Surgery*. 2nd Edinburgh ed., p. 373.

large proportion of the cases on record, the disease appeared in a succession of male infants belonging to the same family.* This fact has been so repeatedly observed that it is evidently due to something more than a mere coincidence. Still the direct transmission of the disease has never been proven, unless in a single case reported by Dr. Manley, in which a woman subject to epistaxis, and whose mother and sister were also liable to passive bleeding from various parts, lost a male infant from umbilical hæmorrhage on the third day after birth. In the case which I have reported no hæmorrhagic tendency could be discovered in the parents or grandparents; and in most of the cases in which the condition of the parents is described, the fathers were of good constitution, and the mothers were healthy and had had natural labours.

The pervious condition of the umbilical vessels has been regarded as constituting in itself a sufficient cause for the production of this disease. By the regular process of nature, obliteration of the umbilical vessels commences on the first, second or third day of extra-uterine life, (Billard, 2d ed., p. 21,) and dessication of the cord proceeds at the same time. Obliteration should be complete on the fourth or fifth day, since this is the ordinary period for the separation of the funis; at least the dessication of the cord being complete on the third day, (Billard, *ibid.*, p. 26,) the vessels should be thereafter sufficiently obliterated to constitute an obstacle to the passage of the blood. But if, from any cause, this process of occlusion is retarded or prevented, hæmorrhage may occur.

The obliteration of the peculiar foetal vessels takes place in the following order:—1. The umbilical arteries; 2. The canalis venosus; 3. The ductus arteriosus; 4. The foramen ovale. (Orfila, *Méd. Lég.* 1848, II., 210.) Now, just as the spontaneous occlusion of the foramen ovale and ductus arteriosus is not always completed in a fixed and identical period, and as these openings, usually closed on the eighth or tenth day, under the influence of unknown causes, may remain pervious until the third or even fourth week, so also it may hap-

* Mr. Ray offers several examples of this fact. He speaks of a woman who lost four sons successively of umbilical hæmorrhage, in each of whom purpuric spots appeared before death. M. Danyau (*L'Union Méd.*) has recently attended two twins of delicate constitution, born at 8½ months, who succumbed to hæmorrhage from the navel, commencing in each on the tenth day, three days after the separation of the cord. Dr. Hooker, of East Cambridge, reports a woman who lost four children from this disease. In several cases, the mothers had lost two infants, while their remaining children were healthy.

pen that the obliteration of the vessels of the cord may not be effectuated at the normal period, the process of nature being retarded by some reason which is not yet discovered.*

It is evident, however, that if umbilical hæmorrhage depended upon the pervious condition of the vessels alone, that the ligature would be more effectual than it is. This fact has led M. Roger to account for the pertinacious recurrence of the bleeding, by asserting the existence, in some cases, of umbilical arteritis. In several autopsies, alterations of the arteries have been discovered, and M. Roger supposes, that in these instances the hæmorrhage was owing to the incapacity of the dilated, friable, and ulcerated vessel, to retract and arrest the flow of blood.

Another more manifest cause of this affection, upon which authors have justly insisted, is the want of coagulability in the blood. The influence of an alteration of the circulating fluid in the production of umbilical hæmorrhage, is demonstrated by facts. In many subjects,

* M. Roger reports that, during the year 1852, M. Lorain, a distinguished resident student at the *Enfants-Trouvés*, made some interesting investigations in regard to the physiology and pathology of the cord and umbilical vessels, and gives the following results of the researches of the latter in relation to the obliteration of the umbilical arteries. "There are two modes of obliteration: in the first, the obliteration is provisional; it suffices for the present necessities of the new-born child, and guards against early accidents; it consists in a clot which forms a few hours after birth. This coagulum is found in children who have not lived more than four or five hours; it commences sometimes in the arteries of the cord, and sometimes at the junction of these vessels with those of the abdomen; it is black, of mediocre consistence, adhering but slightly to the walls of the artery, and is at first very short; subsequently it is elongated by the successive deposition of new molecules, until, at the end of the second day, it occupies two thirds or half the length of the artery, commencing at the umbilicus. It is then firmer, denser, and more adherent to the walls of the vessel. During the succeeding days this coagulum acquires greater consistence, and loses at the same time its black colour, and assumes a fibrinous aspect; it becomes more and more regularly cylindrical. In proportion as the clot contracts, the artery narrows. This may be called the provisional mode of obliteration.

The other consists in the complete occlusion of the artery at its umbilical extremity, an occlusion which occurs in the following manner: The extremity of the artery is retracted from the navel, contracts, and presents a conical extremity; this hardly takes place before the twenty-fifth or thirtieth day; at this date the calibre of the artery is very small, and is occupied by a fibrinous clot, white, dense, regularly cylindrical, and closely adherent to the arterial coats. This is the true obliteration. When Billard speaks of the vessels being obliterated on the fifth day, he does not explain what he means by this occlusion, the mechanism of which he seems to have entirely misunderstood.

the characteristic phenomena of such an alteration are observed during life. Thus, in Case I., the disease was accompanied by hæmatemesis, intestinal hæmorrhage, and a purpuric eruption; in Case II. the ligature was applied with success, but death supervened in consequence of purpura hæmorrhagica. In the present unsatisfactory state of our knowledge respecting the physical and chemical changes of the blood, it is impossible to decide upon the exact nature of the alteration of that fluid which gives rise to umbilical hæmorrhage, or upon the causes of that alteration. It is probable that a deficiency of fibrin either actually exists, or else is apparent, in consequence of its coagulation being prevented by an excess of salts.* So far as any general laws can be deduced from the varying statements of different observers, this is the pathological condition of the blood in the two diseases which most frequently accompany umbilical hæmorrhage, viz: purpura† and icterus.‡ Even supposing the blood to be in a normal condition at the commencement of this disease, we must suppose that the excessive hæmorrhage will speedily produce a change in that portion which remains in the system. Becquerel and Rodier have laid it down as a general law, that bleeding exercises a remarkable influence upon the composition of

* Vogel. *Pathological Anatomy*, Am. ed. p. 79.

† The blood has been analyzed in a case of this disease by Routier. (*Gazette des Hopitaux*, t. vj. No. 90.) The amount of fibrin was less than 1 in 1000 parts. On the other hand Dr. Parkes (*London Medical Gazette*, 1848) gives an analysis of the venous blood in two cases of purpura hæmorrhagica, in the first of which there was a general diminution of all the solid constituents, with a preservation of their relative proportions. In the second, the most remarkable circumstance was an increase in the quantity of fibrin; in both there was a notable augmentation in the proportion of iron. Dr. Alison observes (*Outlines of Pathology*, p. 627) that when the blood coagulates in purpura there are probably complications of different inflammatory diseases with the peculiar state of the blood.

‡ Dr. Budd supposes that the amount of fibrin is reduced in jaundice. (2nd Am. ed. p. 442.) Simon found the fibrin diminished and the salts in excess. (*Chemistry of Man*, Am. ed. 269.) The researches of Lecanu and Denis give, to a certain degree, similar results. It is evident that the condition of the blood in icterus must depend very much upon the cause of that disease. When this consists in an inflammatory affection of the liver, we may expect an augmentation of the fibrin; if it is constituted by an obstruction of the ducts, we may look for an accumulation of cholesterin and fatty matters, as has been proven by Becquerel and Rodier; when lastly, the jaundice is associated with a purpuric condition, there appears to be no tendency to inflammatory reaction, and the properties of the blood resemble those in suppurative fermentation, the proportions of fibrin and corpuscles being diminished.

the blood, and that in proportion to the amount abstracted from the body, the blood becomes more impoverished and watery.

It is difficult to decide whether the jaundice, which so frequently accompanies umbilical hæmorrhage, (in 22 out of 39 cases, Minot,) is a cause or a complication of that disease. Drs. Minot and Jackson suppose that the presence of the bile or some of its elements in the blood, diminishes the coagulating power of that fluid, and it is well known that in very many cases icterus is accompanied, even in adults, by a tendency to obstinate hæmorrhage. That this disease is not essential in the production of bleeding from the navel, is proven by the fact that in many cases no derangement of the biliary function has been observed.

From an examination of these various facts, I am inclined to the opinion that umbilical hæmorrhage is due to a pervious condition of the umbilical arteries, associated with spanæmia; and that this diseased state of the blood often depends upon disorder of the hepatic functions, and is analogous to that which exists in purpura.

SYMPTOMATOLOGY. Precursory symptoms are usually wanting in this disease. In a few instances, ecchymoses and bloody dejections have preceded the hæmorrhage from the umbilicus, and when the disease was accompanied by jaundice, the bowels have been constipated, and the stools clay-coloured. Usually, however, nothing occurs by which the danger may be foreseen. M. Paul Dubois relates in his lectures, the case of a child who was found dead, its clothes saturated with blood; the death and its cause—umbilical hæmorrhage—being thus discovered simultaneously.

The flow of blood frequently commences at night, being favoured, probably, by the warmth of the bed. Sometimes the blood oozes slowly; in other cases, it dribbles away; usually it flows abundantly at the first; in every case, however, it escapes without any impulse or jet. It issues from granulations in the umbilical depression, or from the margin of the umbilical tubercle, or else, as has been observed in a few instances, (see Cases I. and II.) it proceeds from a distinct orifice.

Because the blood oozes without the characteristic arterial jet, it is not necessary to conclude that it is furnished by the vein. Venous hæmorrhage is probably rare, notwithstanding the contrary opinion of Radford. M. Aimable Dubois (*loc. cit.*) observes that the calibre of the umbilical arteries being small, the heart has consequently little influence upon the course of the blood in them. It appears to me that

this is not the true explanation of the absence of arterial impulse, which depends rather upon the anatomical disposition of the parts, the arteries either containing a half-formed coagulum, which deadens the remote impulsion of the heart, or else being retracted within the abdomen, and thus leaving an interval between their open extremities and the umbilical orifice.

The physical characters of the blood are also insufficient to determine the nature of the hæmorrhage. The florid hue of arterial blood is not always present, even when the bleeding is exclusively from the arteries. Perhaps this is due to the patent condition of the ductus arteriosus and foramen ovale, (see Cases II., V., VI.) permitting, in these cases, a mixture of the venous and arterial blood.

The time at which the hæmorrhage occurs is extremely variable. It very rarely precedes the fall of the cord, and scarcely ever occurs immediately after that physiological separation. Still, to a certain extent it appears to depend upon the normal process of mortification. The latest period at which it has been observed is the eighteenth day of life, and the sixth or seventh after the separation of the cord. In some cases the hæmorrhage commences a few hours after birth. The average time in forty-one cases, was the eighth day. (Minot.) The patients sometimes die comatose, but usually from prostration induced by the hæmorrhage.

PROGNOSIS. The chance of recovery in umbilical hæmorrhage is extremely remote; nevertheless the prognosis is not absolutely fatal.

If we add the six cases reported in this article to the forty-six collected by Dr. Minot, together with a fortunate case reported by Mr. Gage,* we have a total of fifty-three cases, of which eight recovered, and forty-five, or more than ninety-one per cent., died. The fatal termination occurs at periods varying from a day to six weeks from the commencement of the hæmorrhage; it is retarded when the bleeding is controlled, and is more prompt when the hæmorrhage commences a few days after birth. There is but a single instance of recovery on record in which jaundice was present.

PATHOLOGICAL ANATOMY. In many cases death is evidently the direct result of umbilical hæmorrhage, and (as in Case V.) the post-mortem examination reveals only a general exsanguined condition of the tissues.

In other children, although death has been incontestably caused by

* *Western Lancet*. September, 1853, p. 552.

hæmorrhage, the anatomical alterations of concomitant diseases, are discovered at the autopsy. In several cases enlargement and structural disorganization of the liver has been noticed; and in three instances the bile-ducts were obstructed. Gelatiniform softening of the stomach, serous effusion in the arachnoid and in the pericardium have each been observed once. In the case reported by M. Aimable Dubois (Case V.) the ductus arteriosus and the foramen ovale were not obliterated, although the patient lived twenty-one days. Mr. Ray also gives the details of a necropsy in which there was discovered a free communication between the pulmonary artery and the aorta, the arterial canal being of the size of a large quill; the patient died on the twelfth day. Lastly, in Cases II. and VI., the ductus arteriosus was pervious, although the one lived thirty-seven days, and the other seven weeks.

Apart from the pervious state of the umbilical vessels, by far the most common cadaveric lesions are those incident to the hæmorrhagic diathesis: apoplexies in the lungs, encephalon, and intestinal canal; ecchymoses and petechial eruptions on the skin and mucous surfaces.

In all of the cases quoted in this article, the umbilical arteries were pervious, and were capable of furnishing blood, either by a minute central canal, or by the sides of half-formed coagula. Dr. Minot mentions one case, in which all the vessels were obliterated, and another, in which the vein was pervious and the arteries were closed. In the majority of instances the blood has appeared to have proceeded chiefly from the arteries, the vein being either contracted or obliterated. In some cases the vessels were healthy; in others they exhibited evident traces of inflammation, being friable (Case V.), nodulated (Case II.), or otherwise altered (Case IV.). In one case the arteries contained pus and coagula. In two cases the vessels were retracted within the abdomen.

TREATMENT. The practitioner who desires to treat hæmorrhage from the umbilicus successfully must not trust to hæmostatics alone: powders of alum and resin, ice, acetate of lead, sulphate of copper, perchloride of iron, matico, spunk, the *eau Brochieri*, tannic acid, and oil of turpentine, have been employed ineffectually, and it is probable that other astringent and styptic agents would likewise fail. Energetic cauterization with the nitrate of silver or the actual cantery have in some cases aggravated the hæmorrhage, in others arrested it tempora-

rily, the hæmorrhage recurring on the separation of the eschar, and in two cases, arrested it completely; both of these patients subsequently died with purpuric symptoms. The chemical cauteries are probably preferable to the heated iron, of which there is an intolerance in the hæmorrhagic diathesis.* Unless the patient has lost too much blood hæmostatic applications should always be fairly tried before severer measures are resorted to; the astringents should have precedence of the escharotics, as they do not render the parts incapable of bearing the subsequent application of pressure. It is rarely that the mouths of the bleeding vessels can be distinctly made out; when, however, they are visible, it will be worth while to try the effect of the injection of coagulants of the blood, as the concentrated solution of the perchloride of iron. Other methods of occluding the bleeding points have been suggested; for example, collodion and plaster of Paris; each of these remedies have been successful in one case.

Compression presents the same uncertain prospects of success. It has sufficed in three cases; in one (Radford, *loc. cit.*) it was practiced by means of a compress and adhesive strips; in the second, it was exercised by a bandage retaining a compress of scrapings of sole leather; in the third, (*Western Lancet*, Sept., 1853) by means of a tailor's thimble, maintained by a circular roller. If the bleeding proceeds from a distinct orifice, compression will be made to the best advantage by means of a *serre-fine*. Burns asserted erroneously that umbilical hæmorrhage might always be controlled by pressure with the finger. The absence of any solid resisting support upon which to exercise pressure, the impossibility of maintaining a compress and retaining bandage in exact position and sufficiently tight in a child who cries, and breathes rapidly, and struggles, all these are obstacles which render compression usually inefficacious.

Some authors advise that incisions should be made, and that a ligature should be placed upon the umbilical vessels. I can find no rules for the performance of this operation in any work on practical surgery, and believe that the attempt to place a ligature on the arteries at any distance from the navel, without a precise guide, would be of questionable propriety. The operation would involve a wound of the peritoneum; the vessels would very probably be found diseased and friable; an incontrollable oozing from the incision itself would result if the

* Miller. (*Op. cit.* p. 376.)

hæmorrhagic tendency was present. The immediate ligature of the umbilical vessels has never been performed so far as I know; it would appear to be a very difficult and hazardous procedure.

The mediate ligature, or the ligature *en masse* should be preferred; it allows the vessels to be compressed without being divided by the thread, and constitutes, in fact, the only method of arresting the hæmorrhage upon which we can rely. The eminent professor of the clinique of the Faculty of Paris, M. Paul Dubois, thus lays down the rules for the execution of this operation.

“The child should be placed on a table of convenient height, its back resting on a pillow, in order that the abdomen may be prominent; two assistants should confine its limbs. The operator commences by transfixing horizontally the *integuments* (not the whole thickness of the abdominal walls) with a hare-lip needle, at the base of the umbilicus; another needle is inserted perpendicularly to the first, and beneath it. Then several turns in figure of 8, with a waxed thread, are to be made around each needle. The needles may be removed on the fourth or fifth day; but the eschar should be allowed to fall of itself, and nothing should be done to hasten its separation.”

The ligature *en masse* is easily performed; it has the advantage over the immediate ligature, of not exposing the peritoneum, and over the ligature of the umbilical tubercle, of arresting the hæmorrhage with greater certainty. It usually controls the hæmorrhage, although in two cases recently observed by M. Danyau, the bleeding returned in spite of it. Although in many instances in which it has been successfully applied, the patients have subsequently succumbed to hæmorrhage from other parts, the operation itself has appeared to have no influence upon the fatal termination, and it was *à priori* no doubt, that Burns condemned the *suture*, and accused it, as well as cauterization, of hastening death by propagating inflammation to the peritoneum. The ligature *en masse* is the best resource; it will save the child if it can be saved.

As soon as the hæmorrhage is checked, no time should be lost in resorting to tonic and anti-hæmorrhagic internal remedies. The muriated tincture of iron is calculated to have a good effect in correcting the abnormal condition of the blood, or we may give the mineral acids, or the sulphate of alum and potassa, or gallic acid, or matico in infusion. Opium and acetate of lead promote coagulation and calm the circulation; the former is especially useful where the vital powers are depressed from excessive loss of blood. Where jaundice was present

I should not hesitate to employ calomel, notwithstanding its anti-plastic properties.

Sulphate of soda is supposed to favour the coagulating power of the blood chemically, and may also be of service by diminishing the amount of serum. This, and the nauseant remedies applicable to active hæmorrhages, must be used with great circumspection.

The patient should be placed in the best hygienic conditions, and the diet should be nutritious, aqueous drinks being avoided. If the mother has been taking alkalies, or if she has lost former children from umbilical hæmorrhage, another nurse should be procured.

Transfusion has been suggested as a last resource. I am not aware that it has ever been practiced.*

* Dr. Minot gives the following analysis of the principal treatment employed in those cases in which the hæmorrhage was permanently arrested: Compression in 3 cases; Ligature in 3; Collodion in 1 case; Plaster of Paris in 1; Scrapings of sole leather in 1; Nitrate of silver in 1.

CHRONICLE OF MEDICAL SCIENCE.

The translations and abstracts under this head, are made expressly for this Journal.

ANATOMY AND PHYSIOLOGY.

1. *Voluntary Movements of the Iris.* By Professor BUDGE.

Certain animals, the parrot for example, have the faculty of contracting or dilating the pupil at will. In such the fibres composing the iris have transverse striæ, like those of voluntary muscle. Budge reports in the *Geneeskundige Courant* (Ap. 3, 1853), that Dr. Beer of the University of Bonn possesses power of voluntarily contracting or dilating the pupil, a singular anomaly, since the movements of the human iris are usually instinctive. Dr. Beer has only to imagine himself in a very obscure or luminous medium, when the change in the pupil takes place immediately. A singular circumstance is, that Dr. Beer can dilate his pupil enormously by fancying himself a sufferer from some distressing emotion. Budge has seen two other individuals who could dilate the pupil by imagining themselves in the dark, but

has never met with any one who, like Dr. Beer, could contract the iris. (*L'Union Médicale.*)

2. *A Fifth Ossicle in the Tympanitic Chain.* By M. PAUL.

M. Paul de Saint Martin, in a note addressed to the society of Biology, professes to have discovered an additional bone, entering into the composition of the *ossicula auditûs*. He proposes to call this bone the *post-stapedius*, on account of its position. So far he has only demonstrated its existence in the ox, horse, and sheep, but does not doubt that it may be found in other mammifers, and perhaps in man.—(*Ibid.*)

3. *A Case of Merycism.* By M. VINCENT.

M. Vincent, of the Academy of Inscriptions and Belles-Lettres, transmitted to the Academy of Sciences the details of a case of merycism (rumination), remarkable on account of the advanced age to which the subject of the observation had attained.

This perversion of the digestive organs had commenced in youth; it originated during a sea-voyage, but had continued after landing. Regurgitations occurred usually about an half hour after the ingestion of food; after a duration of ten years, it had reduced the patient to a state of marasmus, indicative of approaching dissolution. At that date, by the advice of a physician, the patient attempted to subject to a second mastication the food which was rejected from the stomach in a nearly unaltered condition. Assimilation was never performed but imperfectly, as was shown by the extreme emaciation and feebleness of the patient. Nevertheless, in this debilitated condition he had lived 45 years, and was at present 83 years old.—*Compte Rendu du Sèance du 4 Juillet.*

4. *Cause of Death in Animals Killed by Lightning.*

In a note communicated to the Academy of Sciences, M. Ed. Robin develops the following ideas. Lightning, like heat, provokes chemical actions to a remarkable degree. It causes fermentation and arrests it. Submitted to its influence, the nitrogen and oxygen of the atmosphere combine, and the vegetable substances it strikes take fire in contact with the air, when they do not contain a sufficient quantity of water to keep down the elevation of temperature caused by the heat generated in the volatilisation of this liquid. These facts, in the opinion of the author, lead to a new explanation of the general mode of action of lightning in producing the death of animals. When it strikes vegetables, when it strikes animals, the air which envelopes them is highly rarified, their temperature is suddenly elevated, chemical combinations are produced, the oxygen, everywhere diffused, everywhere essential to life, suddenly disappears; contracting sudden combinations, which in normal conditions take place by degrees. Thence, the death of vegetables, and the death of animals, is essentially the effect of an asphyxia resulting from the sudden disappearance of the internal oxygen. The

mechanical lesions due to the direct action of the electric fluid, to the expansion of liquids, to their instantaneous conversion into vapour, are never necessary, are never primary causes. Before the elevation of temperature could cause them, the asphyxia is effected by the disappearance more or less complete of the oxygen.—(*L'Union Médicale*.)

MATERIA MEDICA AND PHARMACY.

5. *On the Adulteration of Drugs.* By M. CHEVALLIER.

As a general rule, a druggist should never dispense a medicine which he has not prepared himself, without first examining it.

The following is a list of some of the medicines which provincial druggists should always carefully analyze upon their reception.

Subnitrate of bismuth containing more of the chloride of the oxide than of the oxide of bismuth.

Kermes mineral containing red ochre.

Magnesia containing chalk and water.

Sulphate of quinia containing large quantities of cinchonine.

Linseed meal from which the greater part of the oil has been extracted.

Gum arabic mixed with an insoluble gum called *India gum*; this gum is added to gum arabic in the proportions of 15 to 100.

Chocolate containing starch.

Balsam of copaiba containing oil of turpentine and a fat oil.

In the large European cities, researches are daily made to test the purity of medicines; but exported drugs should never be exempted from close examination.—*Journal de Chimie Médicale*. July, 1853.

6. *New Preparation of Iodine.* By M. RENAULT.

At the meeting of the academy of medicine of Paris, of July 19th, M. Lecanu read a report upon the researches of M. Renault, a pharmacien of Paris, which had resulted in the discovery of a new combination of iodine, which was offered as an occasional substitute for cod-liver oil.

Direct experiments being wanting, chemists have concluded by analogy, that iodine precipitated albumen, as chlorine is known to do. This, however, is not the fact. On the contrary, albumen will dissolve considerable quantities of iodine. While water will only take up a trace of this metalloid, a quart of water impregnated with six ounces of the white of egg, will dissolve two and a half drachms of iodine entirely. M. Lecanu thought that the *albumine iodée* of M. Renault might be of great therapeutical utility. M. Gibert vehemently opposed the conclusions of the report, on the ground that they were unsupported by clinical experiment.—(*Bulletin de l'Académie Impériale de Médecine*. July 31st, p. 1056.)

SURGICAL THERAPEUTICS.

7. *Electricity as a Therapeutic Agent.* By M. AMUSSAT.

Last year an interesting memoir appeared in England, in relation to the application of electricity to the treatment of surgical diseases, and in particular to the ablation of certain tumours. A few attempts of this sort were made in France by M. Nèlaton, by means of an apparatus constructed by M. Regnaud, *aggrégé* professor at the School of Medicine. M. Alphonse Amussat has since taken up the subject, and in a note addressed to the Institute (*Séance du 18 Juillet*) he announces that he has succeeded by means of a platinum wire heated to luminous whiteness by Bunsen's battery, in curing by cauterization a case of ranula, and a vast anfractuons cavity situated behind the mammary gland. He has also ablated two cancerous tumours, by passing beneath them a double platinum wire, which heated to whiteness and drawn outwards, operated the section of the tumour at its base.—*Archives générales de Médecine.* Août 1853.

STATISTICS.

8. *The Weather in Richmond during the month of August.* By D. TURNER, Esq., A. M.

[Being an extract from a meteorological journal kept by Mr. Turner, at his school rooms.]

Years.	BAROMETER.				THERMOMETER.				Inches of Rain.	Rainy Days.	Cloudiness.	Fogs.	Thunder Showers.	Force of Vapour.	Relative Humidity.	Prevailing Winds.
	Mean.	Maximum.	Minimum.	Range.	Mean.	Maximum.	Minimum.	Range.								
1851,	29.918	30.173	29.530	0.643	76.5	93.0	60.0	33.0	11.11	12	5.2	2	0	.	.	sw.
1852,	29.882	30.090	29.534	0.556	71.8	87.3	60.5	26.8	8.28	13	5.6	5	3	16.4	84	sw.
1853,	29.853	30.082	29.497	0.585	77.3	95.0	58.0	37.0	2.79	7	3.2	0	3	16.1	70	sw.

WINDS—OBSERVATIONS.

	N.	NE.	E.	SE.	S.	SW.	W.	NW.	No Winds.
1851,	13	14	20	7	8	20	6	5	0
1852,	11	2	8	4	10	11	7	16	18
1853,	1	10	1	8	7	50	4	1	9

Rains.—On the 2d, .525 inches; on the 3d, .117; on the 4th, .128;

on the 7th, .077; on the 16th, .314; on the 18th, 1.247; on the 27th, .375. There were three thunder storms.

Hot Days.—On the 1st, 90°; on the 4th, 90°; on the 5th, 93° 5'; on the 6th, 91° 5'; on the 9th, 91° 5'; on the 10th, 91°; on the 11th, 91°; on the 12th, 95°; on the 13th, 93°; on the 14th, 93° 5'; on the 31st, 93°.

The number of days on which the thermometer was at 90° or above, during the last three summers:

1851—In June, 2; July, 14; August, 4. Total, 20.

1852—In June, 6; July, 9; August, 0. Total, 15.

1853—In June, 10; July, 9; August, 11. Total, 30.

A comet of remarkable magnitude and brilliancy was seen during the latter part of the month, in the WNW, setting a short time after the sun, and gradually approaching it. The nucleus was very distinct. Its tail was of sufficiency of length and brilliancy, to be distinctly visible a half hour after the nucleus had disappeared below the horizon.

THERAPEUTICAL RECORD.

Cholera Infantum.—The efficacy of sub-nitrate of bismuth in this affection is incontestable. During the past summer we have had occasion to employ this remedy in a considerable number of cases, and have had every reason to be satisfied with its effects. The bismuth is best administered to children in suspension; the following formula is convenient: Sub-nitrate of bismuth, ʒij.; gum-arabic in powder, ʒj.; orange-flower water, and simple syrup, each, ʒj.; water, ʒij. A teaspoonful every hour. We have found the anti-vomitive powers of this mineral to be very remarkable.—ED.

Furuncles.—M. Nélaton recommends a simple method of preventing the development of boils, which he asserts is exceedingly efficacious. It consists in the application of compresses dipped in very concentrated alcohol upon the parts on which the furuncle threatens to make its appearance. By persevering in this treatment the inflammatory areola is prevented, and the abortion of the boil is procured.—(*Gazette des Hôpitaux*, Aug. 13th.)

Gleet.—M. Bourgeois has found the following formula of service in this obstinate affection: Balsam of tolu, ʒijj.; liquor of sub-acetate of lead, ʒijj.; linseed oil, ʒiv. Reduce the balsam to a fine powder; add three drachms each of the lead-water and oil; then make an emulsion of the whole by adding gradually the remainder of the oil.

This injection is intended for blennorrhœa; the amount of balsam and of sub-acetate of lead being diminished, the remedy may be advantageously employed in gonorrhœa. (*Revue Médicale*, Aug. 15th.)

Hydrocephalus.—At a meeting of the Society of Surgery of Paris, February 9th, 1853, M. Chassaignac presented a young child, four and a half years old, affected with an enormous hydrocephalus. M. Chassaignac stated that the treatment he had pursued was the iodide of potassium applied in frictions upon the head, and since the commencement of this treatment, the volume of the head had been reduced one centimetre ($\frac{1}{3}$ inch).—*Gazette des Hopitaux*.

Otalgia.—Dr. Delioux announces (*Bulletin de Thérapeutique*) a simple remedy, which he has found efficacious in relieving a large number of cases of neuralgia of the ear, and also in curing those cases of erythema in which the chief symptom consists in distressing humming and ringing in the ears. This is local etherization. A few drachms of ether are placed in a bottle, the mouth of which is adapted to the external meatus. The bottle is grasped in the palm of the hand, and the animal warmth suffices to volatilize the ether. Dr. Delioux states that the effects of this treatment are rapid and permanent.

Prolapsus Ani.—A little girl of 11 years was received at the *Hôpital des Enfants Malades*, Nov. 19th, 1852, in a distressing condition in consequence of obstinate prolapse of the rectum. Four fingers could be introduced into the dilated gut, upon which the sphincter appeared to exercise no constriction. The bowels were habitually constipated. After an unsuccessful attempt to relieve the disease by laxatives, M. Guersent determined to employ strychnia. Two blisters were raised upon the margin of the anus by ammonia, and a mixture of strychnia (gr. $\frac{1}{2}$) with a little sugar was sprinkled on the blistered surface, which was then covered with an emollient plaster. The effects of the remedy were satisfactory, and, a few days after, double the quantity of strychnia was applied to a new denuded surface. All tendency to prolapsus ceased, and the child left the hospital in thirteen days perfectly well. *Gazette des Hopitaux*, August 23d.

EDITORIAL AND MISCELLANEOUS.

In commencing a new volume of our Journal, we may not inappropriately review the period of its brief existence which has just concluded, and examine how far those promises and anticipations with which we commenced our task, have been fulfilled.

So far as the *quantity* which we have placed before our readers is concerned, we shall not be accused of parsimony. Instead of the

eighty pages announced in our prospectus, our monthly numbers have consisted of from eighty-eight to a hundred pages of reading matter.

In the original department we have solicited the coöperation of the ablest writers of our acquaintance; our own energies have been devoted to the selection and translation from foreign sources of what might prove of practical utility, to the discussion of topics of general professional interest, and to an attempt at a candid appreciation of current medical literature. Doubtless we have been guilty of many errors and imperfections, and have not always discriminated the grain amid the chaff, a task which simple as it appears, requires a tact and sagacity acquired only by experience; but we shall at least be allowed the humble attribute of good intentions.

But the object of the Journal has not been the diffusion of knowledge alone. We have attempted also in our way, and according to our ability, to promote harmony, good-feeling, and organized effort among the members of the profession; we have endeavoured to exclude from our pages all wanton acerbity of criticism, illiberality of opinion, private malevolence, whatever, in fact, might lacerate the feelings of individuals, or sow dissension in the medical ranks. The Journal has never served as the medium for the expression of opinions prompted by that party spirit, which Lord Bacon characterizes as "the madness of the many for the gain of the few." We have steadfastly aimed to preserve an independent course, and to acquire for our Journal, the character of a catholic work which might be cordially supported by all classes in the profession.

We trust that our short comings have been viewed with indulgence; "*neque cuiquam tam statim clarum ingenium est, ut possit emergere; nisi illi materia, occasio, fautor etiam, commendatorque contingat*" is the sentiment of Pliny, which our readers will please to understand as expressing "that no journal can become perfect immediately, but requires opportunities and materials, patronage too, and commendation." We have but one Patron—the Medical Public; our duty, inclination, interest, all stimulate us to serve this master. We are grateful for the patronage it has already accorded, and under the cheering influence of its continued approbation, we shall strive with undiminished exertion after progressive improvement.

A State Medical Journal.

Among the subjects which will be brought before the Medical Society of Virginia, at its meeting in Charlottesville on the 23d of the present month, is the question of the propriety of establishing a medical periodical under the auspices of the society. The plan proposed by the committee to whom this subject was referred,* is, we believe, (for we have not been favoured with a copy of the prospectus which we learn is circulating through the State) that the society should annually elect a financial director or publisher, with a salary of \$1000, and a board of six editors, to each of whom the duty of collecting and publishing information on some branch of medicine would be assigned; these editors are to be remunerated for their labour by the reputation they would gain by labouring well.

We would simply observe that of some fifteen standing committees appointed by this Association at the meeting preceding the last, not a single one has made a report. We may legitimately conclude that a similar apathy to the duties assigned them would be evinced by the proposed editorial corps. Each member of it would have but a feeble sense of a responsibility shared by so many associates. With no personal interest in the enterprise in which they were engaged, with no stimulus to exertion except the desire of reputation, with the knowledge that the highest editorial fame divided by six was scarcely equivalent to immortality; is it not possible that some of the members of this scientific co-partnership, might manifest after a time a certain lukewarmness in regard to their duties? We think so, and believe that after a few months the proposed journal would fall into the hands of a few zealous spirits, and that far from being a State enterprise, it would become an instrument for party and individual aggrandizement. Being at no risk, not depending upon public favour, uncontrolled by the necessity of pleasing the profession at large, the active members of the editorial board would probably remunerate themselves for their exertions by making the journal subservient to private ends.

Moreover the fraternity would be constituted by individuals inexperienced in editorial functions, and inexperienced in their profession. Physicians engaged in practice would not accept offices entirely devoid either of honour or profit.

* See Virginia Med. & Surg. Journal. Vol. I. p. 123.

Why should we argue, however, about a plan which is utterly futile, when an appeal to experience is so easy? Experiments of this sort have often been made, and have uniformly failed, even when, as in the case of the "North American Medical Journal," every circumstance was in their favour. How can aught but failure be anticipated, in an attempt to establish an organ for an association which meets twice a year, and the annual transactions of which are comprised in a pamphlet of fifteen pages.

At the last meeting of the State Medical Society "on motion of Dr. Atkinson, the constitution was so amended as to make a quorum consist of twenty instead of thirty members." Subsequently, at Dr. Atkinson's suggestion, an error in the minutes was corrected, and the constitution was thereby rendered susceptible of amendment by "*two-thirds of the members present.*" If the approaching meeting in Charlottesville should be a small one, as is very likely, it is quite probable that *eleven* or *fourteen* gentlemen may be found who will lend their sanction to the project on which we have been commenting. But we have an abiding confidence in the good sense and generosity of the profession at large, and hardly apprehend that it will suffer the results of laborious individual enterprise to be sacrificed to vague schemes, however plausibly they may be set forth.

Epidemics.

The first case of yellow fever in New Orleans, occurred this year on the 26th of May. The following is the appalling record of its ravages since, according to the N. O. Med. Register. June, 46 deaths; July, 1387; August, 4798; Total, up to September 1st, 6231. The treatment by large doses of quinine, which has gained great reputation in former epidemics, has not been found to answer in the present one. The following prescription is recommended by Dr. Bennett Dowler: Blue pill, calomel, quinine, each, gr. x.; morphia, gr. ij. Make ten pills; of which one is given every two hours. The Doctor, like Paris's English apothecary when puzzled, fires a good many shot.

The pestilence prevails in many other southern cities. We see by the papers that in Mobile the number of deaths from yellow fever on the 2d of September, was 165. On September 19th, there were 25 deaths at Vicksburg, Miss., in a population of 2000. A correspondent in Galveston writes us, (September 18th,) that the mortality from yellow fever in that city has averaged 10 daily, in a population of 4000. The disease also prevails in Houston, Pensacola, and other southern cities, in most of the West India islands, and in Brazil, to a very alarming extent.

Mr. Paton, surgeon at Kingston, Jamaica, gives, in the London Lancet for August 13th, some account of the yellow fever as it lately prevailed in that city.

All plans of treatment that ingenuity could devise were tried, and with very poor success. At first calomel and quinine was given in large doses, twenty grains of each, repeated if rejected by the stomach, and persevered in until sometimes a hundred grains of each were taken. The mercurial generally had a greater action on the bowels, if not, a dose of oil was given. Purgatives produced rapid exhaustion. When there was tenderness over the stomach, cups or blisters were applied to the epigastrium. Prussic acid and soda were used to allay vomiting; at a later stage this symptom was combatted by turpentine and creosote. Warm baths were used, and ice was applied to the head. Some cases required stimulants from the first; the best were brandy and champagne. Where there was restlessness and insomnia, and the brain did not contra-indicate it, a full dose of Battley's sedative had a good effect. Some were bled freely from the arm at the onset, with great relief at the time, but the symptoms would soon return. Mr. Paton thought that medicine had little power over the disease. He determined to try the sweating system, with wet sheets and the vapour bath. Under this system more recovered, but the mortality was still frightful. Mr. Paton regards the skin as the best emunctory for the elimination of the *materies morbi*.

Morbid anatomy threw little light upon the nature of the disease. The stomach was often healthy, though sometimes its mucous coat was completely disorganized. The liver was always firmer than natural, and of a light lemon colour. The intestines are generally healthy, but full of a thick tarry secretion. The encephalon was sometimes healthy, sometimes congested, with effusion into the ventricles. The blood was always fluid and highly carbonized. No traces of disease were detected in other parts of the system.

Death almost inevitably succeeded the occurrence of black vomit. Mr. Paton considers this symptom a simple hæmatemesis, the characters of the ejected blood being altered by admixture with the gastric juice.

Mr. Laird, Surgeon R. N., attached to the Royal Hospital at Bermuda, bears strong testimony to the efficacy of oil of turpentine in every stage of yellow fever. The dose was twenty minims, thrice daily, in camphor water, and usually nothing else was given. The following statistics are adduced in support of this treatment: Treated without turpentine, 164; died, 25; ratio 1 in 6.6: with turpentine, 164; died, 19; ratio 1 in 8.6.

On the other side of the continent, among the western Indians, and especially among the Sandwich islanders, small-pox is prevailing to a most terrific extent.

The eastern hemisphere is not more fortunate. Throughout Asia and the northern states of Europe, cholera is more or less prevalent.

At Berlin, from June 21st, to July 31st, there were 740 new cases, and 340 deaths. On the 10th of August the cholera was decreasing at Copenhagen. Out of a population of 130,000, the number of victims had been 4000, including 9 physicians, among whom we observe the name of M. Wilthusen, physician to the King of Denmark. More than 40,000 persons had fled from the city. (*L'Union Médicale*, August 25th.) The cholera has reappeared at Moscow. One of its first victims was Dr. Siervruk, professor of anatomy in the university of that city. The fatal epidemic prevails all along the shores of the Baltic, at St. Petersburg, Elsinore, Rega, Cronstadt, Abo, Narva, etc.; the *Journal of St. Petersburg* announces its fearful fatality in the governments of Kiew and Tolin, and in the great commercial city of Bericzen; it has just (August 4th,) broken out in Dantzic. The late advices from England state that it is rumoured that cholera has made its appearance in several British ports.

MEDICAL NEWS AND ITEMS.

Army Medical Board.—A medical board for the examination of assistant surgeons for promotion, and of applicants for appointment in the medical staff of the army, will assemble in New York on the 1st of December 1853. The members of the board are detailed as follows: Surgeons C. A. Finley, R. C. Wood, J. M. Cuyler, Assistant Surgeon J. Simpson as junior member and recorder. *N. Y. Daily Times.*

Scientific Zeal.—Professor Agassiz, while recently prosecuting his ichthyological researches among the rice swamps of the south, contracted the malignant fever of that country, and barely escaped with his life. Among the curiosities which he had collected anterior to this unfortunate interruption of his labours, was a fish without ventral fins; and it is related as expressive of his inextinguishable enthusiasm in matters of science, that when slowly recovering from his malady, a friend called to see him, and said: “I am sorry to hear, Professor, that you have been dangerously ill.” “Ah, yes, said Professor A., I have been very sick; but no matter, I have found a fish without ventrals.”

Births, Marriages and Deaths.—The English government has just issued its sixteenth annual report of births, marriages and deaths, for 1851, in England and Wales. The following is a digest:—Births, 615,865; illegitimates, 42,000; marriages, 154,206; deaths, 397,174.

Poisonous Puffs and Rascally Quacks.—You may take up—or, what is of more consequence, your little boy or girl may take up—a newspaper, and read, on one side of it, a leading article which might be preached out of a pulpit; on the other side a series of turpitudes unfit for utterance under any circumstances. These atrocities are heightened to the point of perfection by the circumstance that they are the puffs of a set of rascally quacks, not the least mischievous of whose suggestions are their recommendations of their own medicines—poison for the body, which they vend to simpletons, whilst they disseminate mental poison gratis, both in the advertisements themselves, and in books which form the subject of them. As the proprietors of journals sullied by these putrescences, may be of the opinion that the odour of gain, from whatever source derived, is agreeable, the following exhortation has been addressed to their customers: “It rests with you—with you alone, newspaper-readers—to stop this torrent, and you can do it, without expense, and with but little self-denial. Let each individual who receives this appeal, write without delay to the editor of the paper he reads, whenever he sees it defiled by one of these easily-recognized advertisements, and say that unless its insertion is discontinued, he cannot, in conscience, any longer patronize the publication. Let each one of you that are advertisers—be you publishers, men of business, authors, masters seeking servants, or servants seeking masters—refuse to appear any more in such company, and let it be known at the newspaper office why you withhold your patronage.” The above paragraph has been extracted from the prospectus of a society which

has been formed for the special purpose of suppressing this villainous puffery. The association is entitled "The Union for the Discouragement of Vicious Advertisements," and we hope that it will succeed in closing a channel of communication which has all the qualities, except the utility, of a gutter.—*Punch*. [And we say, Bravo, Mr. Punch.]

DR. WILLIAM L. POWELL, an esteemed physician of Alexandria, died suddenly on the 4th of September last, of an attack of apoplexy.

DR. ROBERT A. ASHRURN, formerly of Norfolk, has fallen a victim to the yellow fever at Mobile. DR. FRIEND, late a practitioner of Petersburg, has succumbed to the same disease at New Orleans.

BRANSBY BLAKE COOPER, F. R. S., Senior Surgeon to Guy's Hospital, etc., died suddenly at the Atheneum Club, on the 18th of August. He was crossing the hall, when he stopped, called for a glass of water, and, before the water was brought, fell dead, the blood spouting from his mouth.

At the autopsy, a deep excavation was discovered at the root of the tongue; around this excavation the tissues were infiltrated with the elements of carcinoma. The trachea and bronchi contained fluid blood. The hæmorrhage probably proceeded from a perforation of the right lingual artery.

Mr. Cooper, nephew of the great Sir Astley, was a kind and worthy man, and an accomplished surgeon.

New Medical Journals.—A periodical has been established by the faculty of the medical college of Keokuk. Iowa, therefore, enjoys the benefit of two medical journals. We have received the first number of the "People's Medical Gazette," published at Abbeville, S. C. A journal entitled the "Georgia Journal of the Medical Sciences" is projected at Savannah. It is to be published monthly, under the editorship of George F. Cooper, M. D.

PROFESSOR MILLINGTON, who, for many years filled the chair of chemistry at William and Mary college, in a highly satisfactory manner, has been elected professor of chemistry in the medical college at Memphis, and will remove to that city, instead of returning to Virginia, as was expected.

SURGEON WILLIAM WHELAN has been appointed chief of the Naval Bureau of Medicine and Surgery.

We read in the *Moniteur* that the Emperor of France has rewarded Dr. Frederick Thomas, of New Orleans, and Dr. Theodore Gaillardet, at Havana, with the decoration of the Legion of Honour, for their disinterested devotion to the sick during the late epidemic.

Health of the State.—All of the towns in Virginia have been remarkably healthy during the past season. The total number of deaths in Norfolk during the month of August was only 29. The mortality of Petersburg was still less. In Wheeling, the report of the board of health (for they have such a body in Wheeling, although we cannot obtain one in the metropolis) shows the number of deaths during August to have numbered 43, 15 less than during the same period of the preceding year. Staunton, Fredericksburg, and Charlottesville have been equally exempt from fatal disease.

STATISTICS.

8. *The Weather in Richmond during the month of July.* By D. TURNER, Esq., A. M.

[Being an extract from a meteorological journal kept by Mr. Turner, at his school rooms.]

[This report was accidentally omitted in our last number. Ed.]

Hours of Observations, 6 A. M., 2 P. M., 10 P. M.

Years.	BAROMETER.				THERMOMETER.				Inches of Rain.	Rainy Days.	Cloudiness.	Fogs.	Thunder Showers.	Force of Vapour.	Relative Humidity.	Prevailing Winds.
	Mean.	Maximum.	Minimum.	Range.	Mean.	Maximum.	Minimum.	Range.								
1851,	29.847	30.047	29.621	0.426	80.0	97.0	66.0	31.0	2.45	11	4.3	0	4	-	-	sw.
1852,	29.852	30.115	29.478	0.637	76.8	97.5	63.4	34.1	4.72	12	4.5	3	6	16.7	73.6	sw.
1853,	29.875	30.065	29.814	0.451	70.8	102.5	62.5	40.0	6.48	16	5.8	0	3	16.4	72.2	sw.

WINDS—OBSERVATIONS.

	N.	NE.	E.	SE.	S.	SW.	W.	NW.	No Winds.	
1851,	5	6	2	8	15	27	12	8	10	
1852,	2	9	4	8	8	38	1	14	9	
1853,	7	6	4	9	9	34	3	11	10	

Rains.—On the 1st, .370 inches; on the 3d, .090; on the 4th, .050; on the 6th, .530; on the 10th, .840; on the 12th, .080; on the 16th, .255; on the 18th, .140; on the 19th, .480; on the 20th, .855; on the 21st, .773; on the 22d, .119; on the 26th, .270; on the 27th, .079; on the 29th, 1.385; on the 30th, .210.

Hot Days.—On the 1st, 102° 5; on the 3d, 91°; on the 4th, 92°; on the 5th, 91°; on the 6th, 90°; on the 9th, 95°; on the 10th, 95°; on the 25th, 91°; on the 31st, 90°.

BIBLIOGRAPHICAL RECORD.

- I. 1. *A Practical Treatise on the Diseases of Children.* By J. FORSYTH MEIGS, M. D. Second edition, revised and enlarged. 8vo. pp. 711. Philadelphia: Lindsay and Blakiston.
2. *Traité Pratique des Maladies des Nouveaux-Nés, et des Enfants à la Mamelles.* Par E. BOUCHUT, Laureat de l'Institut de France. Deuxième édition considérablement augmentée. Paris: 1853, in-8 de 924 pages. J. B. Baillière.
- A Practical Treatise on the Diseases of New-born Children, and of Infants at the Breast, etc.* By E. BOUCHUT, etc.
3. *A Practical Treatise on the Diseases of Children.* By D. FRANCIS CONDIE, M. D. Fourth edition, revised and augmented. Phila., September, 1853. 8vo., pp. 732. Blanchard and Lea.

Sunt bona, sunt quædam mediocria, sunt mala plura
Quæ legis.—MART. Epig. i. 17.

The art of book-making is carried to such a formidable extent in the present day, that the survey of medical literature alone perhaps transcends the human faculties. Such incessant activity and industry are exercised in every department of medical science, such a variety of new facts are evolved, and so many generalizations are based on them, that it becomes in a manner necessary that a vast number of monographs should be written, and that new systematic treatises should appear to replace the old ones, which depreciate in value every year, from representing less and less the existing state of science and art. The practitioner of medicine, therefore, has not only to contend with the portentous phalanx of diseases, he is conscientiously compelled to undertake a great amount of reading if he would keep well posted in the knowledge of his profession. The physician of the present day must make up his mind to work.

In this state of things it is not surprising that the critics who are laboriously endeavouring to point out to their professional brethren what matter they may read with a reasonable prospect of edification, should be a little exacting, and should ask of each author, to show on what grounds he advanced a new claim to the public attention, already so fully occupied, and should require these self-constituted teachers to give readers as little trouble as possible, and not to dissolve their materials in excessive quantities of verbal menstrua, or to transmit their jewels in super-abundant settings.

It has been observed, by a splenetic reviewer, that the majority of medical works now-a-days were written to procure rather than to record

practice. It would be unjust, perhaps, to apply this remark to the work of Dr. Meigs, but we believe it will be impossible for any one to peruse his treatise without being convinced that it treats of many topics, upon which the author cannot boast of much personal experience, and that generally the epigraph of the writer has been *quod lexi*, rather than *quod vidi, scripsi*. Nevertheless, an able compilation and digest is not without its value, and we must admit that (compared with the unaccountable parturitions of his father's brain, for example) the work of Dr. Meigs appears to us calculated to be useful to a certain degree.

The work commences with an introductory essay of over thirty pages on the clinical examination of infants, in which we have detected no novelty, with the exception of a catechism intended to elicit the precise date of the onset of disease, and a description of certain peculiarities of respiration observed in imperfect expansion and collapse of the lungs.

The author proceeds to treat under six divisions: 1. Of the diseases of the respiratory organs; 2. Of the diseases of the digestive organs; 3. Of the diseases of the nervous system; 4. Of eruptive fevers; 5. Of the diseases of the skin; 6. Of entozoa.

The article on imperfect expansion of the lungs will be read with interest. This condition, called atelectasis by Jörg, was described with remarkable accuracy as early as 1821 by Dugès, but has never attracted in this country the attention it merits. Dr. Meigs enters very fully into the consideration of post-natal atelectasis or collapse of the pulmonary air-cells, a subject of the deepest practical moment. The researches of Legendre and Bailly which first called attention to the distinction between lobular condensation and true hepatization, are fairly presented: we regret, however, that our author does not bring prominently into view the conclusions of Dr. Fuchs,* derived from the experiments of Mendelsohn and Traube, which so clearly establish the nature of the connection between bronchitis and collapse of the pulmonary air-cells. It appears to us that these investigators, together with Dr. Gairdner,† have satisfactorily proved the dependence of the *état foetal* of Legendre and Bailly upon the obstructed condition of the bronchial tubes. Nothing can be more beautiful than the argument of Dr. Gairdner, in which the clinical observations of Rokitansky, Seiffert and Fauvel, in regard to catarrhal pneumonia, are collated with the description of Rilliet and Barthez, of a form of bronchitis attending their "carnification," or "lobular pneumonia," which "carnification" was shown by Legendre and Bailly to consist in a condensation of the air-cells unconnected with inflammation, at least of an ordinary kind. From these various results of clinical observation, post-mortem examination, and experiments on living animals, converging, as it were, to a point, Dr. Gairdner shows very conclusively, we think, that the collapse of the air-cells (*état foetal*) of the lung that has once

* Die Bronchitis der Kinder, Leipzig, 1849.

† On the Pathological Anatomy of Bronchitis, and the Diseases of the Lung connected with Bronchial Obstruction. By W. T. Gairdner. Edinburgh, 1850.

expanded, is a secondary lesion, due to an obstruction of the bronchial tubes. Dr. Meigs neither controverts or admits these positions; he moreover neglects to speak of the frequency of emphysema in collapse, an apparent anomaly which has also been most ingeniously explained by Dr. Gairdner.

Passing to the affections of the digestive organs we observe that the chapter on diseases of the mouth is very imperfect, and abounds in trivialities and reiterations. We are gravely informed that "a sponge-mop is made by fastening a small piece of fine sponge to the end of a stick," and the fact that chloride of lime may sometimes be useful in gangrene and ulceration of the mouth, is insisted upon with most tedious pertinacity. This is one of our chief objections to the treatise of Dr. Meigs; he omits all mention of whole classes of important diseases, *e. g.* diseases of the circulatory system, of the liver, and genito-urinary apparatus, tuberculous affections, etc., and yet finds room for a host of common-place details and trivial and useless suggestions; he thus lends bulk to his volume, it is true, but he completes his readers' weariness at the same time.

Dr. Meigs appears to have no very decided opinions about cholera infantum. Instead of the simple and energetic treatment advised by Dewees, the value of which has been proved by multiplied experience; instead of the masterly analysis of the therapeutical indications of this disease, which Rilliet has recently made public, our author presents some timid recommendations of opium, chalk, and powdered crabs' eyes, or discusses the propriety of administering the tenth of a grain of calomel, or of applying a leech or two to the epigastrium, in an affection which is often mortal in forty-eight hours. Such timorous meditations upon death, cannot be too severely reprehended.

We have not space to examine this work any farther, and will only remark upon it, before passing to the consideration of another treatise, that so far as the publisher and printer could lend it value they have done so, but that the author's part has been very imperfectly performed.

When the latter expresses his own views, they are everywhere open to unfavourable criticism, while there are too many extensive and flagrant omissions for the work to possess any completeness or value as a digest of the opinions of others. The author appears to have a dim sense of the half-apparelled state in which he has rushed before the public, and apologises in his preface for his very unnecessary appearance.

The treatise of M. Bouchut is composed with much greater care. It is not remarkable for originality, and does not pretend to rival the classical labours of Rilliet and Barthez, but its arrangement is good, it is less voluminous than the great standard just mentioned, it treats of congenital affections, deformities, and many surgical affections, and although some points of little practical importance are slurred over, it may be regarded as a very complete work.

The first part of M. Bouchut's book relates to hygiene and the physical education of children; the second is devoted to the "General Pathology of Infancy," a subject of great practical importance, and well

deserving separate consideration; the third grand division treats of the special diseases of infancy. It is out of our power to enter into an examination of the subjects discussed in this portion of the work, for a recapitulation of them, accompanied by the most meagre commentary of the more important topics, would occupy more space than we could possibly spare. We must therefore content ourselves with confidently recommending the treatise of M. Bouchut to students acquainted with the French language, as convenient, reliable, and every way adapted to their requisitions.

Dr. Condie's book on the diseases of children has reached a fourth edition; its utility is therefore recognized. It is the work of a conscientious and laborious physician of considerable erudition and of long experience. It is neither a brilliant nor a profound book; it enters into the discussion of no difficult pathological questions; it is perfectly matter of fact; it is a plain statement of therapeutical directions, and a safe guide to the routine practitioner. The latter personage will be indebted to Dr. Condie for the recipes which are incorporated in his work, and which strew its pages so thickly as to give it in some places the aspect of a formulary.

The present edition contains an analysis of Dr. Minot's paper on umbilical hæmorrhage, a subject which Dr. Condie has been accused, in a preceding part of this journal, of having overlooked. It is furnished with an excellent index, and a long bibliographical catalogue which affords extensive facilities for reference.

As we have already observed, the profession has pronounced its approbation of Dr. Condie's work. Our opinion would add no weight to the decision of the authority most competent in the matter; we have therefore only to announce the reappearance of this treatise in a new and improved form.

II. *Regnault's Elements of Chemistry*. Translated from the French, by T. F. Betton, M. D.; and edited by Messrs. Booth and Faber. Second edition, to which is appended a comparative table of French and English weights and measures. In two octavo volumes, pp. 671-804. Philadelphia: Clark & Hesser. 1853. (From A. Morris.)

We are glad to find that there is a demand for a work of such an elevated and comprehensive character as the one the title of which we have just given, and we congratulate the publishers on the highly creditable manner in which they have supplied this requisition.

M. Regnault's *Cours élémentaire de chimie* was published in Paris in 1849, and immediately acquired a well-merited reputation. It is a most complete work, embracing not only the chemistry of organic and inorganic bodies, but the various applications of this science to the useful arts. Its extent is due to the variety of subjects of which it treats, for the style is as concise as is compatible with clearness, the important facts in connection with each subject are presented succinctly, and the arrangement is admirable.

The translation is contained in nearly fifteen hundred octavo pages,

and is very well done. It is illustrated by a great number of well-executed wood engravings, and is *enriched* (?) by the annotations of two practical chemists of some reputation.

The author enters fully into the subject of organic chemistry, and nearly 100 pages are devoted to the chemistry of the animal tissues and products.

We can recommend this treatise as a most valuable work of reference, and, to those who desire to study chemistry thoroughly, as one of the best text-books they can employ.

III. *Du traitement des fractures des membres*; par M. le docteur J. CROCQ, prosecteur à l'Université de Bruxelles. (Mémoire qui a été honoré, par l'Académie de médecine de Belgique, d'une médaille en or de 1000 francs.) 1 vol. grand in-8 de 544 pages; à Bruxelles, chez de Mortier.

On the Treatment of Fractures of the Extremities; by Dr. CROCQ, etc.

This work is undoubtedly the most complete critical summary of the innumerable methods of treatment of fractures which has yet been made. It has elicited considerable attention in Europe, and we can confidently recommend it to the notice of surgeons in this country.

After a learned historical review, the author examines the various modes of treating fractures which are at present employed, and concludes that the method (*amovo-inamovible*) of M. Seutin by means of the starched bandage, is superior to all others. With certain modifications, he considers this plan applicable to every possible case of fracture in the extremities.

We cannot follow M. Crocq in all the details of his excellent monograph, but inasmuch as the work is designed to set forth the therapeutical indications of fracture in general, and to solve practically the difficulties in the application of M. Seutin's method, rather than to treat of fractures in particular, we shall give a sufficient idea of it and of its importance, by terminating this article by the following conclusions, which contain all the principles of the *amovo-inamovible* method.

1. Every fracture should be reduced immediately.
2. The forces of reduction are three in number: *a.* Extension or traction; *b.* Counter-extension or resistance; *c.* Coaptation or pressure.
3. These forces should be applied in the direction of the fractured bone: not on the bone itself, but on contiguous portions of the limb.
4. The hands of the assistants are always sufficient to obtain reduction. There is no need of machines.
5. The position to be given to the member, for reduction as well as for maintaining it in place, is regulated by the following conditions: *a.* The action of the muscles; *b.* The action of the ligaments; *c.* The form of the articulations.
6. Position of the superior extremity: *a.* Fingers extended in fractures of the metacarpus and phalanges, one fourth flexed in others; *b.* The wrist should always be in extension; *c.* The elbow should be demi-flexed except

in fractures of the olecranon, for which the angle of 160 degrees is most appropriate; *d.* The fore-arm should be placed in semi-pronation; *e.* The elbow should be separated some distance from the body in fractures of the humerus and scapula. *f.* The elbow should touch the side in fractures located between the pectoralis major and the deltoid, in those of the neck of the scapula, and of the coracoid process; the shoulder should be backwards and outwards in those of the clavicle.

7. Position of the inferior extremity: *a.* Foot in demi-flexion; only if the posterior apophysis of the calcaneum is detached, the foot may be moderately extended; *b.* The knee moderately extended; *c.* The coxo-femoral articulation in extension.

8. The position should be modified by certain complications; thus wounds of the dorsal aspect of the arm require extension, and those of the leg and thigh demi-flexion.

9. If immediate reduction by traction is impossible, chloroform should be employed, or the division of the tendons, the latter in the leg especially. If a wound exists, incisions and resections may be indicated.

10. The retentive apparatus should be applied as soon as reduction is accomplished.

11. This apparatus should be, *in every case*, the *amovo-inamovible* apparatus, as I have described it.

12. As regards the bony parts, this apparatus exercises the following action; *a.* It acts the part of a collar, surrounding the fragments, and maintaining them in as perfect apposition as the intermediate soft parts permit; *b.* It exercises a permanent and passive extension and counter-extension, preventing the recurrence of displacement; *c.* This same passive resistance dispenses with the necessity of all special pressure upon isolated points; *d.* It limits and regulates the formation of callus; *e.* It ensures immobility in the articulations encased by it.

13. As to the soft parts; *a.* It prevents and moderates inflammations and pain; *b.* It fatigues the muscles and hinders their contraction; *c.* It allows the limb to be examined at any time, without a derangement of the apparatus which contains the coaptation.

14. It exercises the same effects in complications; whence the latter, so far from counter-indicating it, indicate it the more strongly.

15. In the majority of cases, the ordinary starched apparatus, or the padded apparatus, may be employed indifferently; in certain cases, in which it is necessary to shun all refrigeration, the latter should be preferred.

16. It renders the topical remedies usually employed useless. The only remedies which can be advantageously associated with it, are: cold in violent inflammations, mercurial ointment in erysipelas, and the actual cautery when erysipelas menaces the life of the patient.

17. Splinters should never be extracted unless there is an external wound, and then only those which are completely detached should be removed.

18. Compression and the ligature are the means to be used in hæmorrhage. The latter should be practiced in the wound, if the artery can be found; if there is no wound, or if the artery is deep-seated, it must be tied above; if the hæmorrhage is secondary, the vessel must be secured at some distance from the wounded point.

19. Wounds should be hermetically closed by means of adhesive plaster: if they suppurate, they must, on the contrary, be left open; if purulent accumulations occur, it will be necessary to exercise an expulsive compression, and to make counter-openings.

20. The limb should be placed so that the declivity should be from the limb towards the trunk, during the first period of inflammation; the de-

clivity should be from the trunk towards the extremity during the period of suppuration.

21. All the local lesions which complicate fractures, even when they exist by themselves, require immobility and circular compression ; *a fortiori*, therefore, when they are associated with fracture. Therefore nothing can counter-indicate the *amovo-inamovible* apparatus.

22. It is especially indicated by nervous and brain affections, which require perfect immobility and exact retention.

23. It does away with the necessity of special modes of transportation, and of beds of peculiar construction.

24. *General treatment of simple fracture* : Diminution of diet ; emetic or emeto-cathartic medicine ; blood-letting when there is plethora. In violent contusions, wounds, and inflammation, diet, emetics, blood-letting, repeated if necessary. In abundant suppurations, restoratives, tonics, and ferruginous preparations.

25. The patient not only *may* walk about and remain in the open air, but *ought* to do so in every case, unless this is forbidden by the general condition. This is essentially necessary in old men, who are liable to hypostatic engorgements and to gangrene.

26. Purulent infection especially requires that the patient should be kept in the open air ; locally, injections with the nitrate of silver should be employed.

27. All the cachexies (among which purulent infection may very well be ranked), require also exercise and open air. In all these cases, the immovable apparatus, which allows the patient to be transported and to walk, is the only one which can be applied with advantage.

28. It is necessary to employ passive movements of the articulations at convenient periods, in order to prevent stiffness or ankylosis.

29. In those cases in which it is necessary to place the joint in an abnormal position, (extension at the elbow, demi-flexion at the knee,) the position must be gradually altered.

30. The *amovo-inamovible* apparatus prevents deformed callus, and it favours their absorption, when they exist already.

31. It enables us to cure all fractures (except, of course, where there is loss of substance) without *shortening* ; in those of the femur and its neck, the maximum of shortening is one centimetre ($\frac{1}{2}$ inch).

32. The fracture or rupture of deformed callus should be very rarely attempted.

33. The immovable apparatus is the most effectual preventive of pseudarthrosis.

34. It is equally the best curative measure in these cases ; it should be used alone at first ; afterwards in conjunction with frictions and movements of the fragments ; and lastly, in connection with the sub-cutaneous method.

35. Immediate amputation should be performed :—*a*. When there is great laceration of the soft parts ; *b*. When the humeral or crural arteries are torn in the upper portion of their course ; *c*. When the artery and vein or artery and nerve are wounded together ; *d*. When the greater portion of the bone is comminuted ; *e*. When the knee-joint is opened.

36. Immediate resection is indicated : *a*. In every fracture complicated with wound of the head of the femur or humerus ; *b*. Whenever a joint is shattered, except in the case of the knee-joint, in which amputation is preferable.

37. These operations are indicated secondarily by profuse suppurations, which are exhausting the patient, and against which all the resources of medical therapeutics have been in vain essayed, and which have not caused purulent infection. They are also rendered necessary by gangrene.

- IV. *The Microscopist; or a Complete Manual on the Use of the Microscope, etc.; with illustrations.* By JOSEPH H. WYTHES, M. D. Philadelphia: Lindsay & Blakiston. 1853. Duodecimo, pp. 212.

Those who are totally ignorant of the microscope, and desire to use it as a plaything only, may derive some information from this little compilation; but those who wish to acquire a thorough knowledge of the construction, manipulation, and applications of this instrument, will find it exceedingly unsatisfactory. Such students must still have recourse to the works of Quekett, Robin, and Donné. On the other hand, the large class who are contented with a superficial knowledge of the subject, will find this work quite adapted to their requisitions. It is cheap, well-printed, and the illustrations are good. It may be procured from Mr. A. Morris.

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- V. *A Treatise on Operative Ophthalmic Surgery.* By H. HAYNES WAITON. Edited by SQUIRE LITTELL, M. D. Philadelphia. 1853. 8vo, pp. 599. With 169 wood engravings. Lindsay & Blakiston.

We have nothing to add to the commendations we have already liberally bestowed upon the English edition of this truly valuable work. (*See Va. Med. and Surg. Jour.*, vol. I. p. 335:) The reprint equals in point of execution, any American work of the kind with which we are acquainted. The typography is excellent, the exquisite engravings of the original are well copied; the editor appears to have been aware that his sponsorship was superfluous, and has not obtruded any unnecessary additions. Altogether we can recommend this work as nearly equal to the original, whilst its price is only a little more than half of that of the English copy.

Our editorial copy was transmitted through Mr. Morris, who has the work for sale.

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- VI. *Hallucinations: or the Rational History of Apparitions, Visions, Dreams, Ecstasy, Magnetism, and Somnambulism.* By A. BRIERRE DE BOISMONT, D. M. P., etc. First American from the second Paris edition. 8vo. pp. xii-553. Philadelphia. 1853. Lindsay & Blakiston. (From A. Morris.)

This work is neither exclusively medical nor entirely literary; but whilst the author presents his treatise in a form quite intelligible to all classes of readers, he addresses it particularly to physicians. The principal divisions accord with our customs; the chapters are arranged in the accustomed order of works on pathology; causes are discussed, and symptoms, morbid anatomy, progress, prognosis, and even treatment.

The book is certainly attractive; it abounds in anecdotes, it is exempt from profound dissertation, and the style is good; moreover, the subject of hallucinations is exceedingly interesting. The great erudition of the author has enabled him to collect materials from sources which are not within common reach. Everything that approaches the marvellous finds a place here. M. Brierre de Boismont is not of a sceptical turn, and he subjects these data to very indulgent criticism.

Hallucination is a phenomenon common to various forms of delirium. From the fact, therefore, that it does not serve to characterize either of the types of insanity, it results that hallucination has little importance in a semeiological point of view. Nevertheless, authors have frequently isolated this phenomenon, and made it the subject of a monograph or special chapter, guided, in so doing, less by scientific considerations than by a sort of instinctive curiosity. What can give a better measure of the aberration of the intellect, than the obstinate belief of the insane in their imaginary creations, so antagonistic to our habitual reliance on our perceptions, and to our absolute and legitimate faith in our senses? It would seem that observers, in concentrating their attention on this order of phenomena, would accomplish a useful task, and would contribute to the advancement of science. We are not sure, however, that it is well thus to decompose the elements of medical observation. The author presently transforms the symptoms with which he is occupied into a pathological form, and regards as a disease what is only an accessory phenomenon. M. Brierre de Boismont has not resisted this temptation any more than others, and in yielding to it, he has abandoned the path of rigorous enquiry, which those best acquainted with mental diseases have marked out.

As we have before intimated, our author does not subject his facts to severe analysis, and altogether he narrates too much and discusses too little. We are not inclined, therefore, to assign a high practical scientific value to his treatise; but, on the other hand, we can recommend it to those interested in the topics of which it treats, as easy and most delightful reading, and as abounding in valuable information, which is conveyed in an attractive manner.

VII. *Dr. Hooper's Physician's Vade-Mecum; or a Manual of the Principles and Practice of Physic. Enlarged and Improved.* By WILLIAM A. GUY, M. D. With additions. By J. STEWART. Philadelphia: Barrington & Haswell. 1853. pp. 541.

We have always regarded Dr. Hooper's work as one of the most valuable manuals which have been presented to the profession. The present edition has received many additions and alterations at the hands of the laborious English editor, and has been brought up to the knowledge of the present day with care and ability.

VIII. *The Maternal Management of Children in Health and Disease.* By THOMAS BULL, M. D. Second edition. 12mo. pp. 424. Philadelphia. 1853. Lindsay & Blakiston.

The medical profession very properly anathematizes all books intended to guide the *laity* in the treatment of disease, for it is well aware of the rashness of ignorance, and of the danger of a little knowledge. On the other hand, it is highly important that the public should be informed on hygienic laws. This is the legitimate field for those authors who address themselves to the public, and, in our opinion, it should never be transgressed. Being, therefore, of the strictest sect of the

conservatives, we can only commend that portion of Mr. Bull's work which treats of the management of children in health, although the remaining portions are as little objectionable as "domestic medicine" is susceptible of being made. The style of the work is clear and unostentatious, and the directions are generally judicious.

IX. *The Physician's Visiting List, Diary, and Book of Engagements*, for 1854. Philadelphia: Lindsay & Blakiston.

We are indebted to the publishers for a copy of this convenient little work. It is in great favour with the profession. Those who have not heretofore used it, will do well to procure it; we are satisfied they will find it a most serviceable pocket companion.

The following additional works have been received, and will be noticed in the next number of the Journal:—Wilde's Aural Surgery; Transactions of the Tennessee Medical Society; Transactions of the Pharmaceutical Association.

ENGLISH MEDICAL WORKS RECENTLY PUBLISHED.

	s.	d.
Lectures on Clinical Medicine. By J. H. Bennett. Nos. 1 to 8,	16	0
Annals of Anatomy and Physiology. By J. Goodin. No. 3,	3	6
On the Use of an Artificial Membrana Tympani. By Toynbee. 8vo., pp. 48,	1	6
Hufeland's Art of Prolonging Life. Edited by Erasmus Wilson. Foolscap. Churchill,	2	6
On Diseases of the Chest and Air-passages. By Dr. James Bright. 8vo. cloth. Churchill,	6	0
Practical Observations on the Treatment of Club-foot. By John Lizars. 2nd ed. Highley,	1	0
On the Nature and Treatment of Deformities of the Human Frame. By W. J. Little, M. D., etc. pp. 402. Longmans,	15	0
Aural Surgery. By W. R. Wilde. Churchill,	12	6
On the Diseases of the Kidney. By George Johnson, M. D. Octavo. Parker, West Strand,	14	0
Lectures on Surgical Pathology. By James Paget, F. R. S. 2 vols, 8vo. With numerous wood-engravings. Longmans,	28	0
The second volume comprising Lectures on Tumours may be had separately,	16	0
Commentaries on the Surgery of the War in Portugal, Spain, France, and the Netherlands. By G. J. Guthrie. Fifth edition. Revised to 1853, with wood cuts. Longmans,	14	0
Diseases of the Breast. By John Birkett. 8vo., with coloured plates. Longmans,	12	6
On the Decline of Life in Health and Disease. By Barnard Van Oven, M. D. Post 8vo., cloth. Churchill,	10	6
Plates of the Brain. 23 lithographs. By Jos. Swan. 4to. Longmans,	21	0

THE FOLLOWING WORKS ARE ANNOUNCED.

Principles and Practice of Surgery. By John Erichsen. (October.)

A New Work on Materia Medica and Therapeutics. By A. B. Garrod, M. D., etc.

Clinical Lectures on Diseases of the Rectum. By Richard Quain, F. R. S.

A Hand-book of Organic Analysis. By J. Liebig. Edited by Dr. Hoffman.

A Hand-book of Inorganic Analysis. By Friedrich Wohler, M. D. Translated and edited by Dr. Hoffman.

THE
VIRGINIA
MEDICAL AND SURGICAL JOURNAL

FOR NOVEMBER 1853.

ART. I.—*Contributions to Pharmacy.* By JOHN P. METTAUER, M. D., LL. D., of Virginia, Professor of the Principles and Practice of Medicine and Surgery, in the Medical Department of Randolph Macon College.

It will not be denied that the operation of therapeutical agents is essentially influenced by the mode by which they are prepared.

This fact, so generally true, is particularly exemplified in the preparations of cinchona, cantharides, colchicum, guiacum, and several other medicinal substances of which I shall speak presently.

For more than twenty-five years, my attention has been particularly directed to this subject, and, during this period, I have adopted several new methods of preparing some of the articles of the materia medica, and have satisfied myself, by repeated practical trials, that these preparations possessed superior efficacy to those generally employed.

Many years ago I prepared an acetous infusion of cantharides,* for blistering purposes. This infusion was first designed for vesicating the scalps of infants, without removing the hair; and its action was very satisfactory. It was applied simply by wetting the surface of the head, and the hair nearest its roots, and then carefully covering the parts with a cabbage leaf, or oiled silk, to prevent the too sudden evaporation of the blistering fluid. When other parts of the body were to be blistered, a thin compress of bibulous paper, or cloth saturated with the

* R. Canth. contus., ℥iiss.; Acid acet., Oij. Digest for 14 days, and filter.

infusion, was applied to them, and carefully covered with oiled silk. To insure speedy and effective vesication, I usually re-applied the tincture two or three times, after intervals of half an hour. I found this agent equally as efficient and certain in its action with adults as with infants. It rendered the removal of the hair unnecessary, as it blistered every part of the surface, even when a very thick head of hair existed. This preparation has been used by many of my medical friends, and with entire satisfaction. Within the last ten years, I was induced to prepare an æthereous solution of cantharides* as a vesicant, and have found it far more prompt and certain in its operation than the acetous infusion. It may be applied in the same manner as the latter. Frequently, merely wetting the skin with the solution, without covering the part, will blister; especially in infants. When adults are to be blistered, the preparation should generally be applied with a thin compress, and carefully covered, as already suggested,—moistening the compress from time to time, until the skin is decidedly reddened. I have found this by far the most convenient and reliable means of blistering that I have ever employed. This æthereal tincture of cantharides is also an efficient internal remedy. As an emmenagogue and diuretic it has greatly exceeded my expectation. The æthereous menstruum seems not only to promote the operation of the cantharidin upon the genito-urinary organs; but at the same time to guard against strangury. I now use this preparation of cantharides almost exclusively, both externally and internally, when the lytta is indicated, and have done so for seven or eight years.

The remarkable efficacy of the æthereous preparation of the Spanish Fly induced me, five years ago, to employ spirits of nitric æther as a menstruum for cubebs, colchicum, guiacum, squill, ergot, gossypium, sanguinaria, ipecacuanha, digitalis, nux vomica, and some other articles of less importance. The æthereous tincture of cubebs† is a most valuable remedy in all the sub-acute inflammations of the bladder, of the urethra; of the uterine cavity, and of the mucous lining of the stomach and intestines. It should be administered in some mucilaginous vehicle.

*R_x. Cantharid. contus., ℥iij.; Spirit. æth. nitric, Oijss. Digest for 8 days, and filter.

†R_x. Pip. cubeb. contus., ℥iv.; Spirit. æth. nitric, Oij. Digest 8 days, and filter.

The tincture of colchicum* is applicable to the treatment of all of the cases demanding the use of the colchicum, and is decidedly preferable to the vinous seminal tincture now in use, by reason of its tendency to act on the urinary system. It is very well adapted to the treatment of sub-acute rheumatism, gout, œdema, and neuralgic rheumatism, especially if the urinary secretion is materially diminished in quantity. In the bloating occasionally connected with the dysmenorrhœa, a combination of this tincture with the æthereous tincture of cantharides, sanguinaria and gum guiacum will be found a most valuable remedy. It should be taken three or four times daily in an infusion of pine tops, in doses of ten to twenty drops each. The same combination will also be found valuable in the sub-acute stage of gout and rheumatism.

The æthereous tincture of gum guiacum† is superior to the preparations of that article now in general use in the treatment of rheumatism by reason of its tendency to act on the urinary system; and the same may be said of it as an emmenagogue when there is rheumatic irritation of the uterus as an associate cause of dysmenorrhœa.

The æthereous tincture of squill‡ is adapted to all cases in which squill is indicated, and is an elegant preparation. In dropsy; œdema of the mucous lining of the larynx, and of the lungs, in asthma, and as an expectorant and diuretic it will be found a most convenient and valuable preparation. A combination of equal parts of this tincture and of the syrup of lobelia inflata taken three or four times daily, in doses of ʒss. to ʒj. each, is the most efficient remedy I have ever used in asthma.

The æthereous tincture of ergot§ is best suited to cases of inaction or torpor of the uterus connected with debility or exhaustion; it may be used either as an emmenagogue or as a parturient. In uterine hæmorrhage, or menorrhagia dependent on debility, or exhaustion of the uterus, it will be found a valuable remedy. Its action upon the uterus is greatly influenced by the æthereous menstruum. It is best to give it

* R̄. Sem. colchic. contus., ʒiv.; Spirit. æth. nitric, Oij. Digest 10 days, and filter.

† R̄. Guiac. gum. resin, ʒiv.; Spirit. æthe. nitric, Oij. Digest 8 days, and decant.

‡ R̄. Seill. maritim. contus., ʒiv.; Spirit. æth. nitric, Oij. Digest 8 days, and filter.

§ R̄. Ergot. contus., ʒij.; spirit æth. nitric, Oj. Digest 10 days, and filter.

in some diuretic vehicle, such as pine tops tea, or flax seed or elm tea; and it may be taken in doses of ʒss. to ʒij. once in four or five hours

• The tincture of gossypium* is possessed of properties very similar to that of ergot and may be employed in like doses with it, and in similar diseases.

The tincture of sanguinaria† is valuable when combined with the tinctures of cantharides, guaiacum, colchicum, cubebs, and indeed any other emmenagogue, in the treatment of dysmenorrhœa. It is also a valuable expectorant and diaphoretic in pneumonia, bronchitis, and œdema of the mucous lining of the air passages. It is administered in doses from ʒss. to ʒij., once in three or four hours. This tincture may also be employed alone as a diaphoretic and expectorant.

The æthereous tincture of ipecacuanha‡ is so closely assimilated to the tincture of the sanguinaria in its therapeutical properties, as to be applicable to the treatment of the same diseases. It is an elegant and most convenient preparation. In typhoid fever it will be found far superior to the ipecac pill as a diaphoretic, especially when the tongue is dry and the thirst urgent. It may be used also in typhus fever, or indeed in any febrile affections during the sub-acute stage. This valuable preparation acts both as a diaphoretic and diuretic in these cases, as well as an expectorant.

The æthereous tincture of digitalis§ is a far better preparation than the alcoholic, on account of its greater activity; and this it derives chiefly from the æthereous menstruum. In doses from ʒss. to ʒj., in some diuretic infusion, taken three times daily, it will be found well adapted to all such cases as require the foxglove.

The æthereous tincture of nux vomica|| is especially indicated in the treatment of seminal debility, or to speak more properly, debility of the generative organs. In this, the gravest of human ills, after such preliminary treatment as may be demanded for the correction of con-

* R̄. Gossypii. herbac, ʒiv.; Spirit. æth. nitric, Oij. Digest for 10 days, and filter.

† R̄. Sanguinar. canadens. contus, ʒiv.; spirit. æth. nitric., Oij. Digest 8 days and filter.

‡ R̄. Cephael. ipecac. rad. contus., ʒij.; spirit. æth. nitric., Oij. Digest 8 days, and filter.

§ R̄. Digital. purp. fal., ʒiss.; spirit. æth. nitric., Oij. Digest for 10 days, and filter.

|| R̄. Nucis vomicæ pulv., ʒij.; spirit. æth. nitric, Oij. Digest 10 days and filter.

stipation, and prostatic tenderness, this tincture will be found a most excellent means of restoring the erections. It is also valuable in exciting appetite for food, and in the invigoration of the digestive organs. This preparation is well adapted likewise to the treatment of paraplegia, especially when the bladder and rectum are implicated, as well as such other forms of paralysis as demand the nux vomica or its alkaloid. It may be given in doses from ʒss. to ʒiss. three times daily, before or after meals, in some bitter infusion. The cold infusion of wild cherry bark I have generally preferred as the vehicle for it.

The æthereous solutions or tinctures are more readily prepared, requiring to be digested for a less time than the alcoholic, and keep without the least deterioration. They are also adapted to those conditions of the constitution in which alcoholic menstrua would be objectionable.

Hydrargyrum cum creta. This valuable preparation of mercury is usually formed by triturating ʒiij. mercury with ʒv. of prepared chalk, until the globules are extinguished. This is a tedious process, and the resulting powder is not of uniform strength, nor is the mercury completely rubbed down. Indeed, it is questionable whether the powder, when apparently well formed, always contains mercury, as a compound may be readily formed by uniting other colouring substances with chalk, to imitate blue mercurial powder; and I think I have met with such imitations several times. The blue powder that I have procured from the shops has generally disappointed me; and for a number of years I have prepared it myself according to the following method:

Take one part of pure starch; eight parts of prepared chalk; and sixteen parts of mercury. Reduce the starch to fine powder. The chalk may now be added, and after being well mixed, the mercury can be united. The powder must next be moistened with water, but not to the extent of wetting it; and the whole rubbed until nearly dry, when the mass should be again moistened and rubbed dry. In this manner the process must be repeated from time to time, as may be convenient, until the powder assumes a uniform bluish appearance. After the chalk seems to be saturated with the mercury, rub the mass perfectly dry, and then moisten it sufficiently to make it adhere to the surface of the mortar by pressing with the pestle. By carefully passing the pestle over the adhering mass, so as to render its surface smooth the superfluous mercury will now escape from it in small globules and fall to the bottom of the mortar, and the separation may be facili-

tated by striking the bottom of the mortar against the table repeatedly, and by pouring the mercury over the surface of the mass where any globules appear. The mercury may now be removed from the mortar; and as soon as the mass becomes sufficiently dry, the trituration must be renewed and continued until the mass becomes a smooth, dry powder. Prepared according to this method, I have used blue powder in my practice more than twenty-five years, and have uniformly found it far more certain in its operation than that obtained from the shops. I prescribe it in the ordinary doses, or nearly so, and yet I am satisfied it is stronger than that in general use. I invariably direct it to be administered nearly dry, united with brown sugar, and to be mixed in a cup by stirring the powder and sugar together with a straw or the point of a knife. The dose may then be taken into the mouth and swallowed, first with the saliva, and afterwards with a mouthful of water. This powder should never be mixed in a silver spoon, or any other utensil possessing an affinity for mercury, or the powder may be rendered entirely inert; and such an accident once befell a patient of mine, who nearly lost her life before the cause of failure of the medicine in producing its proper effects was discovered.

ART. II.—*A Report of a Fatal Case of Tetanus.* By WILLIAM W. PARKER, M. D., of Richmond.

On Friday, the 16th of September, 1853, I was requested to see Miss E. J——, aged ten years, who had fallen from a height of from ten to twelve feet upon a brick pavement. I arrived at the house about two hours after the accident, and, upon examination, found an incision through the skin of the right knee, over the inner aspect of the patella, about an inch long; also, upon the head, two small incisions, of which she made no complaint. The knee was hot and swollen, and quite sensitive to pressure. She was much opposed to any motion of the joint. Pulse quick, considerable fever, skin hot. I ordered perfect rest of the member, with constant cold applications, and applied adhesive straps to the wounded integument. Leg to be semi-flexed.

Saturday, 17th. Patient had passed rather restless night; complained much of the knee and desired to have the straps removed; decidedly more feverish; pulse quick, but not full; countenance anxious. Ordered free saline purgation, and a febrifuge of tartar and nitre, I

think. Laudanum if restless at night. Continue cold applications to the knee joint. Limb to be elevated.

Sunday, 18th. Complains much of the knee, which is still much enlarged and œdematous. Passed a quiet night. Removed the straps and applied poultices, which seemed very grateful. Administered a calomel purge. and ordered laudanum at night, if sleepless. No suppuration. Wound gapes widely. Condition rather improved to-day.

Monday, 19th. Still feverish. Knee hot and much swollen. Ordered free leeching, with directions that warm poultices should be applied and bleeding encouraged. Anodyne at night. (Leeching would have been earlier resorted to but for the expense.)

Tuesday, 20th. Much improved. Fever abated, and but little heat of knee, though it is still as œdematous as heretofore. Free suppuration from the incision. Upon pressing the outer aspect of the patella in an oblique direction upwards from the incision, laudable pus flowed freely. Some appetite to-day. No anxiety of countenance. All medicine discontinued. Poultices still applied to joint.

Wednesday, 21st. Condition perfectly satisfactory; improved in every respect. Can bear almost any amount of pressure upon the patella without pain. It was freely handled to see if there had been any fracture. None was detected.

Thursday, 22d. Convalescence most decided. Needs nothing but rest. The wounded integument is partially closed by straps. The afternoon of this day (as I afterwards learned) she ascended a high pair of steps with but little difficulty. This was in violation of my orders, of course.

Friday, 23d. Was sent for early, but did not get the message. Called at 12 o'clock, M., and was informed by the mother that my patient had passed a restless night—had complained of pain in the back of her neck, and some stiffness of lower jaw. These symptoms manifested themselves towards daybreak, and had steadily advanced. A fully formed case of tetanus was most obviously present.

Having in other cases, treated by myself as well as others, seen the opiate and other plans of treatment recommended in the books fail; and having also, on several occasions, witnessed the prompt alleviation of the disease under the use of chloroform, I determined to rely upon this agent almost entirely in this case. Perfect relaxation was produced in a few minutes after etherization was commenced, and the horrible spectre seemed to be dispelled as if by magic. I remained about an hour, and all the while kept up this anæsthetic state, and upon departing left the administration of the chloroform to a nurse, after carefully instructing her how to use it. She was to apply the oil-silk inhaler whenever the patient exhibited the least disposition to move hand or foot, or to utter a syllable. In a few hours I saw her again. Anæsthesia was not as profound as I desired. It was again well maintained for an hour by myself at this visit. It was also continued by the nurse till ten o'clock at night, when I called; but I regretted that from timidity the chloroform was not as freely administered as desired. I made several efforts to administer food and drink this evening, but de-

glutition was impossible. On several occasions the strangulation was so distressing that death was apprehended. I had no stomach tube at the time. Ordered blister to the spine.

Saturday, 24th. Saw the patient early. Several ounces of chloroform had been administered during the night, but the anæsthetic state not perfect when I made my visit. Opisthotonos more decided, and spasm of the intercostal muscles occasionally; is perfectly rational; condition worse, pulse more rapid and feeble. Spasms intense when not under the influence of the chloroform. At each of the visits paid her to-day I introduced a gutta percha stomach tube, while profoundly anæsthetized, and administered milk freely, and milk toddy in the afternoon when her pulse began to flag. Rich soup was also given. As night approached she became much worse. The chloroform was kept up to-day in my absence, but imperfectly, as on yesterday. Shortly after my arrival at 8 o'clock at night she was seized with a spasm of the intercostal muscles and the diaphragm, perhaps, and was in a moment dead.

Thinking there might have been some serious injury to the joint, I got permission on the following day to make an examination of it. Examining first the patella (assisted by Dr. Pollard) I found no disease of that bone at the point beneath the incision, but on the outer aspect of the bone, the direction from whence the pus issued as above stated, the periosteum was removed for a space nearly equal to a half dime piece. Here, however, the bone was not at all roughened, but simply stripped of its covering. Upon the division of the capsular ligament some eight ounces of pure serum escaped; and upon a free exposure of the articular surfaces some one or two points of congestion were observed. These small vessels seemed to carry arterial blood, On extending our incision, however, up the shaft of the femur, we observed much thickening of the periosteum for several inches on the anterior aspect of the bone. The membrane had a distinct villous appearance, and was much congested.

There may perhaps be two points of some interest in this case:

1st. Its rapid termination, to wit: in about thirty-six hours after its development; and

2d. The reliance placed upon chloroform in its treatment. In the thirty-six hours about 8 ounces were administered, none of which was wasted. It was poured upon a small piece of sponge attached to oil silk and thus inhaled.

I sincerely regret that it was out of my power to be with the patient all the time, and administer the chloroform myself; relying entirely upon it and upon nourishment. I have no doubt that a patient may, with perfect safety, be kept under the influence of chloroform for a week, and perhaps longer, so as to be wholly unconscious, if a sufficiency of food be at the same time administered.

Should I meet with another case of tetanus, I shall, if possible, make the experiment. I know from repeated observations that chloroform will relieve any spasm whatever. For some time past I have treated hysterical spasms with it, giving afterwards a dose of morphia, which maintains the control over the nervous system when once acquired by the chloroform. In my opinion there is no comparison between this mode of treating hysteria and those formerly employed, and I have tried both repeatedly.

ART. III.—*Of the Expectant Method pursued at the Military Hospital of Antwerp, in the Treatment of Acute Articular Rheumatism.**
By J. DEWALSCHÉ, Adjunct Physician to the Hospital. [Translated from the Archives Belges de Médecine Militaire.]

I propose in this essay to make known the method pursued by Dr. Gouzée, in the treatment of articular rheumatism, and the results which he obtains by it. This subject is not without interest, there being no acute disease in regard to the treatment of which the opinions of physicians are more divergent than this. Unanimous in their judgment of the gravity, long duration, and the danger of the complications of rheumatism, they all teach that it should be opposed energetically; but disagreement arises as soon as it becomes necessary to select the therapeutic agents which shall be employed. Some can only see safety in repeated venesections, others recommend active medicines, to be given in large doses usually, and each one boasts of the preëminent advantages of his own plan.

Imbued with these notions before my arrival, in 1847, at the military hospital of Antwerp, it was not without terror that I saw M. Gouzée employing an expectant treatment in the most intense cases of febrile articular rheumatism. This dismay was converted into aston-

* I have been astonished that physicians who have endeavoured to appreciate the value of the different modes of treatment recommended in articular rheumatism, have never examined into the course of this disease uninfluenced by remedies. The memoir of Dr. Dewalsche in part supplies this want, and furnishes instructive facts bearing upon this capital point.—*Note by M. MALGAIGNE.*

ishment, when I observed that his patients recovered more rapidly than those I had previously seen subjected to the ordinary methods.

Yet Dr. Gouzée had already made known his plan of treatment. In a report of his clinic for the second quarter of 1843, that eminent practitioner writes as follows :

“Of late years, there have been recommended the most violent and disproportionate modes of treating acute articular rheumatism. Tartarized antimony, nitrate of potash, blood-letting, opium, iodide of potassium, and sulphate of quinia have been employed in frightfully enormous doses ; and, surely, it cannot be asserted that a large proportion of the patients subjected to these various methods of treatment have been cured *cito, tuto, et jucunde*. It is even said that sulphate of quinia, administered in Rasorian doses, has occasionally jugulated the patient instead of the disease.

“I have long employed a simple expectant treatment in this disease, and a year has never elapsed without my having cause for astonishment at the facility and promptitude with which my patients recovered.”—(*Archives Belges*. Jan. 1844, p. 7.)

Since that time Dr. Gouzée has occasionally recurred to this topic, and I had believed that his opinions were generally known and appreciated, until the perusal of recent scientific publications, and a late discussion in the Academy of Medicine of Paris convinced me that they had not attracted all the attention they merited. I believed then that it would not be unprofitable to report some cases of rheumatism treated on the expectant plan. If they do not convince practitioners of the incontestable superiority of this method, they may at least, by making known the natural progress of rheumatism left to itself, serve as points of comparison, from which the degree of efficacy of the various means recommended in this disease, may be deduced.

M. Gouzée's treatment is most simple. The gentle, equable and continued warmth of the bed, in a pure and temperate atmosphere ; and a mild drink, taken warm or cold, according to the patient's taste, but always in great abundance. If the articulations of the superior extremities are particularly affected, the arms are placed in bathing-pans of warm water twice a day, and are allowed to remain one or two hours, the rest of the body being carefully covered ; these local baths are sometimes used for the lower extremities, but, in this case, their employment is attended with many difficulties. The local baths moderate pain and swelling, procure general relaxation, favour perspiration ; they do not fatigue the patients, or necessitate painful move-

ments, or permit the surface to be chilled as it is after general baths, which M. Gouzée never employs. During the intervals, the affected parts are covered with cataplasms or with sheets of cotton-batting. After the pain in the joints has disappeared, the patient should still remain in bed for several days, until the disease is completely dissipated. At this period M. Gouzée no longer insists upon a severe diet; experience has taught him that a substantial diet, accompanied by some bitter tonic, by a decoction of bark, or solution of quinia, are generally of great utility towards the termination of rheumatism, in procuring a more prompt and complete cure, and in preventing relapses.

Here is an example of the rapidity with which rheumatism, of very considerable intensity, may subside under the influence of the simplest means:—

CASE I.—Torfs, (cornet au 3e chasseurs à pied,) 20 years of age, never having had any sickness, entered the military hospital of Antwerp, June 27, 1850. For three days, he has experienced pain and stiffness in the joints, with a febrile movement in the evening.

June 28th. Swelling, heat, pain, and slight redness of the knees and ankles. The pain is greatest in the right knee. The countenance is animated, the cheeks flushed, the pulse at 100, the skin hot and dry; no sleep, nothing abnormal in the sounds of the heart. (*Copious diluent drinks. Diet.*)

June 29th. Abundant sweats all night. The pain has left the lower limbs, which remain stiff, and has invaded the wrists, which are red and tumefied; the slightest movement of the arms is insupportable. The shoulders are also painful and swollen. (*Arm-baths, twice.*)

June 30th. The same copious sweating during the night, sleep, moderated pain, less swelling, pulse at 84. (*Same treatment.*)

July 1st. There is scarcely any pain, the pulse has fallen to 76, the nocturnal perspiration continued. (*Continued repose in bed. Broth.*)

July 2d. The patient can move the articulations of the arms; he experiences pain about the scapula. The diaphoresis has become constant.

July 3d. No pain, pulse at 60, nothing abnormal about the heart. The patient leaves his bed. (*Improved diet. Eggs.*)

A slight diarrhoea supervened upon the 5th, but readily yielded to a sweetened solution of salep, with syrup of white poppies.

July 7th. A solution of six grains of sulphate of quinia was prescribed.

July 10th. The temperature fell in consequence of a cold wind. The patient experiences vague pains in the knees and in the right shoulder. (*Repose in bed.*) The pains passed off the following day, and convalescence was fully established on the 12th. Four grains of sulphate of quinia was administered, and a more liberal allowance of food.

The patient left the hospital on August 1st.

This case presents an instance of rheumatism, accompanied by a febrile movement from the onset, a great number of articulations being involved at the same time, and nevertheless a cure was obtained with wonderful rapidity, since convalescence was established on the sixth day of the treatment, and the ninth day after the invasion of the disease. Surely, no one will pretend to procure a more prompt and satisfactory result, from any mode of treatment.

The following observation is not less remarkable :

CASE II.—Vandeputte, cannoneer in the 4th artillery, 21 years of age, robust, of strong constitution, entered the military hospital of Antwerp, January 17th, 1851. Two days before, while on duty, he had experienced acute pain in the left hip, which became so violent, that upon the following day he was unable to walk.

January 18th. The pain in the hip was gone. I found the ankles hot and swollen, and very painful. No sleep; pulse full and calm, temperature of the skin normal. (*Repose in bed. Common ptisan. Two soups.*)

Jan. 19th. Same state, except that the right knee is painful, but without tumefaction.

Jan. 20th. The tibio-tarsal articulations are free; the pain in the knee continues. The patient has slept well.

Jan. 21st. The pain in the knee has diminished. (*Same treatment. A little solid food.*)

Jan. 22d. The pain has left the knee, and has invaded the right shoulder; it is intense, and prevents any movement of the arm; no sleep; pulse at 78. (*Same prescription.*)

Jan. 23d. The pain is transferred to the left wrist and elbow, and to the joints of the right middle finger; the latter are red and tumefied. Pulse 74. (*Arm-baths, twice.*) Moisture of the surface has been present since the entrance of the patient into the hospital. There is no thirst; the stools are regular; the viscera of the chest are exempt from any complication.

Jan. 24th. The weather, hitherto mild and beautiful, became cold; wind from the northwest. The left knee and wrist are red, hot, tumefied, and so painful that the patient has not slept. Intense fever, thirst, pulse at 100, skin hot but moist. The patient complains of a pain under the right nipple, and coughs, and expectorates some mucous sputa. Nothing abnormal upon exploring the chest. (*Same local baths. Absolute diet.*)

Jan. 25th. The pain, diminished in the knee, entirely gone from the elbow, has invaded the fingers, which are swollen; pulse at 84; less cough. (*Same treatment. Soups.*)

Jan. 26th. The two wrists are still stiff and swollen, but there is no pain any where. The cough has been troublesome, and has kept the patient awake; pulse 88. (*Same treatment.*)

Jan. 27th. Much less cough, sleep tranquil, no pain, pulse at 66.

Jan. 29th. No more cough; the swelling and stiffness of the wrists has gone. The patient walks about the ward. (*Sulphate of quinia, grs. iv. ; water, ℥iv. ; simple syrup, ℥j. A spoonful every two hours.*)

Jan. 30th. The patient was allowed solid food. Towards evening there was a storm; the mercury descended very low in the barometer; during the night the pain returned in the left shoulder, elbow and wrist, and continued on the 31st. (*Arm-baths.*)

Feb. 1st. There is no longer any pain. The patient has a good colour and complexion, and but little loss of strength; the convalescence continues notwithstanding the frequent atmospheric changes. The diet is gradually increased.

He left the hospital on the 6th of March.

In this case, the patient was young and vigorous, as our cannoneers usually are; he was suffering from a shifting articular rheumatism, which had only lasted two days. The circumstances, in the eyes of a partisan of bloodletting, would have been so many indications for frequent and copious abstractions of blood. Nevertheless, we see that the disease pursued its course without accidents, and terminated in twelve days, with scarcely any treatment, leaving neither feebleness nor anæmia behind it, and having lasted only two weeks altogether.

The two preceding facts confirm the results of the observations to which Dr. Gouzée has long devoted himself, in regard to the great influence which the state of the atmosphere exerts upon the progress, duration, and intensity of the majority of diseases, and especially of acute articular rheumatism. This latter affection is readily exasperated by sudden meteorological changes, and particularly by east or north-east winds, which, in our climate, render the atmosphere dry and cold; under the influence of the mild and humid weather which accompanies southern and western winds, patients with this disease usually amend rapidly. Therefore M. Gouzée deems it important to carefully note, in giving the history of diseases, the meteorological vicissitudes which may have occurred, in order that we may better understand the effect that remedies have had independently of those powerful influences of external agents, which are usually so little regarded.

CASE III.—Panhuyzen, a soldier of the carbineer regiment, aged 23, of sanguine temperament, entered the hospital on the 4th of May, 1852, having arrived from the camp at Braschaert. For two days past he has had acute pains, shifting from one articulation to another.

May 5th. The two feet, but particularly the left, are painful, red, and swollen. The general suffering is considerable. Sleeplessness, flushed face, frequent pulse, skin moist. The heart's sounds are normal. (*Free drinks, cataplasms loco dol.*)

May 6th. Same pains, abundant sweats, pulse at 90.

May 7th. Sweats continue abundant, less pain, sleeps well.

May 8th. Feet are free; right wrist attacked, sweats. (*Arm-baths.*)

May 11th. Left wrist involved; pulse at 80, less perspiration.

May 12th. Suffering much diminished.

May 14th. Convalescence, the patient leaves his bed. (*Improved diet.*)

He left the hospital on the 25th.

CASE IV.—Boston, a soldier in the 1st artillery, 21 years, robust and sanguine, has never been sick previously. On July 2d, 1852, having got wet while on duty at Braschaert, he was taken with a chill, followed by a fever. The next day, pain in the joints of the inferior extremities. He was transported to the hospital on July 4th.

July 5th. The two knees and the left foot are swollen, red, and painful. Face animated, pulse frequent, sweat copious, heart's sounds normal. (*Repose, drinks, diet.*)

On the following days the fever gradually diminished, the pain and swelling continue in the left knee. (*Raw cotton.*)

On the 10th, convalescence; exit on the 12th.

I have no remark to make on the two preceding cases. The following observation is more important, both on account of the intensity of the disease, and of the existence of a bellows sound at the heart.

CASE V.—Jods, soldier in the 3d foot chasseurs, 21 years, lymphatic, but with a tolerably good constitution, suffered a year since with acute articular rheumatism.

On the 3d of June, 1851, after being on duty all night, he had a violent chill, accompanied by pain in the lumbar region. This was treated, at his quarters, by a saturnine lotion, but persisted until the 8th, when the articulations of the extremities became involved. On the 9th he was brought to the hospital.

June 10th. I found the ankles and the right wrist swollen, red, hot, and very painful. The patient could not sleep on account of his suffering; the pulse, at 104, was incompressible; the skin was hot and moist. Auscultation discovered a loud murmur, amounting almost to a rasping sound, in place of the first sound of the heart. The existence of this symptom, which was particularly apparent towards the left side of the heart, was verified by Dr. Gouzée. The patient had no præcordial pain, or oppression, the dullness of that region was not augmented, and the lungs were healthy. (*Repose in bed, arm-baths, diet.*)

June 11th. The right knee is slightly tumefied, and very painful, the other articulations are in the same condition as yesterday. The abnormal bruit of the heart continues; the pulse is regular at 88; an abundant diaphoresis is established. The patient has slept well. (*Same treatment.*)

June 12th. The pain in the ankles has disappeared, it is diminished in the wrist and knee; the joints of the toes of the right foot are congested and painful. The murmur of the heart is less rude and not so loud; the sweating continues; no stool for four days. Altogether, the patient suffers less. (*Same treatment.*)

June 13th. The patient feels so well that he believes himself cured. All the articulations heretofore affected are free. Slight pain in right shoulder. *Bruit de râpe* diminished, pulse at 84, sweat, two natural dejections. (*Continuc in bed, diet.*)

June 14th. No pain anywhere, pulse at 74, heart's sounds are normal; M. Gouzée, however, believes that he can detect a slight trace of the murmur which has masked the first sound. (*Repose; soup; rice and milk.*)

June 15th. Pulse 64. All the functions are well performed.

June 16th. Dr. Gouzée considers the heart's sounds normal. The patient took a solution containing four grains of quinia, which was repeated the next day. His diet was gradually improved. This soldier resumed his duties on the 1st of July.

What was the semeiological value of the abnormal cardiac murmur observed in this patient? Was it the sign of acute endocarditis? Was it the result of an organic lesion which occurred during the antecedent attack of rheumatism? The question is difficult. I do not know how those physicians who consider the bellows murmur which occasionally supervenes during the course of articular rheumatism, a sufficient sign in itself of the existence of acute endocarditis, can explain it. The absence of præcordial anxiety, oppression, and pain, the regularity of the pulse, and the fact that only a normal degree of dullness existed, inclined us at first to believe that this murmur depended upon an old organic lesion. Therefore we expected that it would continue after the cure of the rheumatism. Nevertheless, it diminished rapidly, and finally ceased almost as soon as the disease of the joints, without any medication having been employed against it. This unexpected result induced us to think that the murmur should be attributed to some other cause.

This fact had already been remarked. M. Gouzée who had observed it frequently, published some reflections upon it in the essay we have already cited: "In one patient, he says, there was a bellows murmur accompanying the first sound of the heart, which disappeared during the convalescence. There are two curious questions, in connection with this murmur, which will be decided at some future day, when the prejudices of the day have subsided. These are: whether the endocardial murmur is as frequently the expression of an endocarditis,

as some physicians imagine; and, secondly, whether certain modes of treating rheumatism have not great influence in the production of this sound." More recently, in 1851, Dr. Hart, a regimental surgeon, has made known a similar case, in an essay published in the *Archives de médecine militaire*. It remains to find an explanation of these curious facts. Does the endocardial murmur depend upon a change in the composition of the blood?

"It has been asked, say the authors of the *Compendium de médecine pratique*, (art. *Auscultation*,) if the peculiar murmurs which characterize anæmia and chlorosis are not due to a modification in the composition of the blood. Then, from a generalization of this idea, it has been suggested that if the blood, when it has become more fluid and less abundant, produces, in circulating through the vessels, murmurs that are not observed when it is endowed with its normal qualities, perhaps, by an inverse modification, when it is more plastic, richer, more consistent, more abundant, it may occasion analogous murmurs. This would lead to the following conclusions: 1. The bellows murmur may be the result of a diminution in the quantity of the circulating fluid; 2. It may be the result of an increase in the quantity of blood in circulation; 3. The bellows murmur may sometimes indicate an abnormal fluidity in the blood; 4. It may also characterize an augmentation in the plasticity of the blood; in a few words, any notable change in the quantity or quality of the blood contained in the cavities of the heart, may produce a modification in its sounds. Then it would be established that, *if the bellows murmur frequently occurs as a coincident phenomenon in articular rheumatism, it is proper to attribute this circumstance to the well-known alterations presented by the blood in that disease.*"

These propositions are not demonstrated, any more than is the fact of the existence of endocarditis under the same circumstances; but, as the authors just quoted remark, they begin to have supporters.

Let us not forget to remark once more the rapidity of the cure in this case. Notwithstanding the intensity of the disease, convalescence was established in less than a fortnight.

CASE VI.—Warnier, quartermaster in the 1st artillery, 23 years of age, brown hair, brown skin, face habitually florid, has suffered from three intense attacks of articular rheumatism since January, 1846. The first was treated by depletion at Gand, the second at Antwerp on the expectant plan, and the third at Bruges.

The 10th of June 1850, being at the polygon of Braschaert, he was seized with pain in the inferior extremities, and went to bed.

On the 15th, the pains became more intense, and fever came on. The following day he was carried to the military hospital at Antwerp.

June 17th. Wrists red, very much swollen, very painful upon the slightest movement; left knee tumefied and slightly painful; pain in the neck, in the shoulders, and in the back and sides; face very much flushed; pulse at 112, regular but not very full; slight murmur accompanying the first sound of the heart, most apparent just beyond the nipple; diarrhoea since the 12th. The wind is north, and the weather cold. (This state of the temperature lasted until the 28th). (*Arm-baths; gum water with syrup of poppies, diet.*)

June 18th. The condition of the wrists is improved; the left knee and right instep are affected; the pains about the trunk are ameliorated; pulse at 90; same murmur at the heart; abundant sweat; more diarrhoea. (*Arm baths, broth, rice and milk.*)

June 19th. Slept well, right wrist still swollen, vague pains in the fingers; left knee and right foot are free. (*Continue in bed, diluent drinks.*)

June 20th. There only remains a slightly painful tumefaction of the right wrist, and a little uneasiness about the sternum; the diaphoresis continues; pulse at 80, cardiac *souffle* less loud, countenance natural; stools normal.

June 21st. The wrist, knee, and fingers are stiff but not painful, pulse at 75; the patient walks in the gardens. On the 22d all of the articulations were free, and all of the functions were well performed. There was still a slight endocardial murmur.

After the 25th, the bellows murmur gradually diminished; on the 30th, it was no longer perceptible. The patient left the hospital on the 6th of July.

In this patient there was a marked progressive amelioration, notwithstanding the most unfavourable atmospherical circumstances. As in the preceding case, the murmur which existed in the cardiac region subsided gradually and spontaneously. Nothing proves that these patients were the subjects of acute endocarditis, because, in the first place, the simple occurrence of a bellows murmur should not be considered pathognomonic of that affection, and, secondly, because this phenomenon disappeared of itself almost simultaneously with the cure of the rheumatism, which would not have been the case if it had depended upon a phlegmasia of the internal membrane of the heart. If, admitting the existence of that phlegmasia, we had instituted an active antiphlogistic treatment, it is probable that the venesections would not have prevented the cessation of the murmur. Then, the cure of a redoubtable complication would have been attributed to energetic medication, whereas the efforts of nature, seconded by careful nursing, were quite competent to set everything in order.

We could easily multiply cases, but we believe that those which we have already cited are sufficient to justify the following conclusions :

1. Acute articular rheumatism has a natural tendency to terminate in the course of one or two weeks.

2. Treated on an expectant plan, by simple hygienic and dietetic precautions, it pursues its march without danger, and ceases as soon, if not sooner, than when combatted by active measures.

3. It is not proven that the active treatments recommended in this disease are useful or even innocent.

4. The cardiac murmurs which are frequently observed during the course of rheumatism disappear spontaneously in the great majority of cases, in proportion as the disease ameliorates, and under the influence of the simplest treatment.

5. It is far from being demonstrated that these sounds are always the sign of endocarditis.

ART. IV.—*On the Endemic Diseases of Sweden.* By Dr. MAGNUS-HUSS, of Stockholm. [Archives Générales de Médecine.]

For some years past, questions relating to medical geography have attracted the attention of physicians in a particular manner. To arrive at notions which are positive and of useful application, on this subject, it is requisite that documents should be accumulated in great number, should be collected in different climates, and should offer the guaranties of rigorous observation. The circumstances in which I have been placed have permitted me to fulfil some of these essential conditions, and I have hoped to contribute to the advancement of science, by arranging in a special treatise the facts which I have studied. It is a summary of this work, published in the Swedish language,* that I propose to present in this essay. I shall endeavour to suppress all details which are incomprehensible without an exact knowledge of the localities referred to, without omitting anything essential. My only aim is to describe that which relates to the geographical distribution

* *The Endemic Diseases of Sweden.* (*Om Sverges endemiska sjukdomar*); octavo, pp. 131. Stockholm, 1852.

of diseases, and the local causes which favour their production, so far as they are known with any precision.

The physician who proposes to study the endemic diseases of a country cannot fulfil the vast task alone. However extensive his experience may be, its field is always too limited to permit him to draw conclusions from facts which he has witnessed himself. Convinced of the necessity of having recourse to the assistance of competent men, I have called upon a large number of the physicians of my country, and they have all responded to my wishes with generous assiduity. The data on which this work is founded are not supported by my personal observation only, but by the numerous reports which I have collated and coördinated; they therefore offer all the authenticity which can be hoped for in a work of this kind.

The endemic diseases of Sweden may be divided into two classes: 1. Those which belong to certain circumscribed localities; 2. Those which are disseminated, and which are found in different degrees in most parts of the country. In the absence of more scientific boundaries, it will be best to adopt, in describing the extension of the local diseases comprised in the first class, the administrative division of Sweden into provinces.

In Laponia the endemic disease *par excellence* is chronic conjunctivitis, which ordinarily assumes the granular form; it is rarely that a Lapon is met with, after the period of childhood, who has not red and watery eyes. The conjunctivitis improves during the summer, but becomes aggravated during the winter and especially in the spring season. This affection is caused and maintained by the mode of life which these tribes are compelled to adopt during the long winters. The huts which they inhabit are constantly filled with thick smoke; the fire is kindled in the middle of the cabin, and the only exit for the smoke is through a small hole in the conical roof. In the spring the inflammation is kept up by an equally powerful cause. One must have travelled over those immense snow fields, without a dark spot on which the eye may repose, to appreciate how intolerable are the rays of the sun when reflected from plains of dazzling whiteness.

In northern Bothnia, the bothryocephalus is so common, that the disposition to become affected with this parasite should be ranked among its endemic diseases. It is most frequently met with among the inhabitants of the shores of the gulf of Bothnia. The disease is confined to the sea-side, except when it follows the course of rivers into

the interior. It disappears at the boundaries of the hilly country; that is to say about eight miles from the coast. In this locality there is scarcely a family in which some of the members are not attacked with this pest; it is found at all ages, in the new-born child as well as in the aged. Foreigners who visit this district are affected with it after a longer or shorter sojourn. The causes are obscure. The natives attribute it to the nature of their food, which consists exclusively of fish, and particularly of salmon. The physicians are disposed to accuse the drinking water, experience having proved that this entozoon is found more frequently where the water is of bad quality. In the mountains, where the springs are as pure as crystal, it is never encountered.

The province of Algermannia deserves to be mentioned because it is the northern limit of scrofula; here scrofula loses its sporadic character, and becomes a common disease. The northern boundary of scrofulous diseases in Sweden, is then about the 63° of latitude; the farther you advance towards the south from this point, the greater frequency and intensity is observed in this disease.

The province of Helsingelande is the only one in Sweden in which the elephantiasis of the Greeks is seen. This affection is endemic along the banks of the great river Ljusnan. According to official statistics, it has gradually diminished in frequency in the last twelve years. In the last century, this disease was common on the borders of the four great rivers of this country; it now prevails only in the locality I have mentioned. It is exclusively hereditary, although it sometimes passes over one generation, and attacks the succeeding one. The transmission is most frequent in the male line. Elephantiasis usually occurs at about 25 or 30 years, and the wretched victims of it frequently do not succumb until after 20 or 30 years of suffering. The proportion of male to female patients is as 6 to 1. As to the causes of the disease, independently of hereditary predisposition, it is observed to appear almost exclusively in villages adjoining marshes, and in districts inundated by freshets in the river.

Intermittent fever is not found north of the province of Gestriesia, situated between 60° and 61° of latitude, and 33° and 35° of longitude. I shall take occasion farther on, to recur to the geographical extent of this disease.

In Dalecarlia, there are two endemic affections. Gofstre prevails in the villages surrounding the chief town of the province, which are hemmed in by high mountains. Women are exclusively affected by it,

and it rarely acquires great gravity. It is not without interest to remark that this is the only province in Sweden in which goitre has been seen. On the margin of Lake Siljan, which is of vast extent, dysentery occurs regularly every year in the months of August and September, sometimes in a grave, at others in a benignant form; in the former case it extends over the whole province, often assuming an epidemic character. I will mention one other peculiarity, which has been observed in other parts of the world; the inhabitants of a portion of the province, who are chiefly stone-cutters, are nearly all subject to chronic bronchitis.

Dahlslande offers a remarkable pathological phenomenon, which demands attentive study. Croup is here endemic in a district of about four square miles. This district, situated at the mouth of a river emptying into the great lake Wener, is very much exposed to north winds, from which it is entirely unsheltered. The greatest number of cases occur in the winter, and during the prevalence of these winds. It attacks children of from 1 to 6 years, and of a hundred patients, only a fourth, at the very utmost, are saved.

The province of Bohus situated on the shores of the North Sea, has been long known as the principal seat of the endemic disease designated by the name of *radesyge*. Opinions are still divided in regard to this tubercular affection of the skin; some consider it a distinct species, others as a form of hereditary syphilis. The most recent and complete monograph on this subject, was published in 1850, by Dr. Kjerrufl, who for a long period directed the hospital of this province in which this disease is specially treated. The author admits that *radesyge* is not a consequence of syphilis. The lower class of the population alone is affected by it; fishermen especially, whose food consists almost exclusively of fish, and who live in the greatest filth and misery.

Western Gothia furnishes a proof, among many others, of the obstinacy with which the Swedish peasant preserves his traditional prejudices. The country is elevated, bare, without forests, and healthy; but the itch is so prevalent that out of a population of some thousands it may be said that not a single individual is free from it. This strange endemic may be attributed partly to the inclination these people have to be slovenly, but it is kept up by a more powerful cause, by a prejudice which has been rooted among them from time immemorial:

that the itch is a sovereign prophylactic, and that whoever is affected with it, need not fear other diseases.

An affection foreign to the Swedish climate, for a long time extended its ravages throughout eastern Gothia. Two soldiers returned to their homes after the war of 1815, suffering from the purulent ophthalmia which then reigned in the allied armies. Imported by these two men, the disease was communicated hither and thither in the surrounding districts. It was thus propagated throughout the province, and it is only of late years that they have succeeded in nearly eradicating it.

The province of Blekingen will conclude this rapid enumeration. It has been established that cerebral congestions and inflammations in children are endemic in certain portions of this province, and especially in the city of Carlshamm, (6000 inhabitants) and its vicinity. This city is situated in a deep valley, very narrow in consequence of its remoteness from the sea, and the mountains which rise on either side of it. The disease prevails especially during the spring and autumn, when the sharp sea winds are felt in the interior. Children are most predisposed to it from the end of the first, to the beginning of the fourth year; official statistics show that from 30 to 40 per cent. are attacked by it.

After having mentioned the diseases peculiar to each province, which are interesting either on account of their speciality, or geographical distribution, it remains to me in order to complete this piece of medical geography, to examine, in a summary manner, the second class of endemic diseases, viz: those which are not restricted to limited districts, but which are found throughout Sweden; these are intermittent fever, scrofula, pyrosis, and chlorosis.

Intermittent fever is endemic in Sweden from the most southern provinces to as far on the shores of the Baltic as the 60° of latitude; farther north, it ceases to exist as an indigenous disease, and is only met with in individuals who having sojourned several months, at least, in the south, have subsequently removed to a higher latitude. Among the inhabitants who live constantly at the north, a case of intermittent fever is a very rare exception. The spring and autumn fevers do not differ from those of the rest of Europe. They are usually mild, and only become malignant in unfavourable localities.

Scrofula, in all its forms, is very common from the southernmost province, Scania, to 63° of latitude; farther north it is extremely rare. It is most common in Scania. It is incontestable that scrofula has be-

come much more frequent in Sweden since the introduction of the culture of the potatoe. It usually developes itself in a mild form, and, among the inhabitants of the country, nature usually suffices to cure the disease by the time that puberty is asserted.

From the southern to the northern frontiers of Sweden, pyrosis is certainly the disease which is most common among the lower classes; the men as well as the women, the young as well as the aged, are attacked by it; it is a real national evil, from which few persons belonging to the working classes escape; the higher classes, even, are not exempt from it, although they suffer less. The frequency of pyrosis, which prevails in the country as well as in the town, depends upon various causes. First among these must rank, unhappily for the Swedish nation, the use and abuse of brandy, together with indigestible food; the diet of the working classes consists chiefly of salted meats, of fish, smoked or salt pork, potatoes, coagulated milk, and hard bread. In most of the provinces, the bread is made of oats or barley.

The development of chlorosis merits attention, and furnishes matter for some pathogenic considerations; this is a new disease among the rural population of Sweden; formerly it was only observed among the nobles, or among the inhabitants of cities; it was unknown in the country. In the last twenty years it has spread through the country with frightful rapidity, and is now regarded as the most common disease of youth. Females, as usual, are most exposed to it from 15 to 20 years of age, but boys too, are chlorotic. The evil has reached such a height that, in some parts of the country, a young woman entirely free from chlorosis is remarked upon as an exception. The people themselves have observed that a new disease has been introduced, and are alarmed at its progress; the superstitious inhabitants view it as a punishment from Heaven, and an indication of the end of the world. According to their belief, the human race will be more and more enfeebled before being annihilated, and they see in chlorosis, and the debility which accompanies it, a sign of this deterioration.

I have studied with care the circumstances, under the influence of which the disease seems to have been developed. I believe its principal causes are the abuse of spirituous liquors, and the injurious changes in the customs of the peasantry which have gradually been effected. Almost everywhere the people have exchanged their former warm and comfortable costume of homespun for lighter foreign fabrics; their present dress is not a sufficient protection against the severity of the

climate; children especially are subjected to the effects of cold, and their development is retarded by its deteriorating influence. The female population of the country was formerly accustomed to participate in the labour of the fields from childhood; this salutary exercise is now almost abandoned, and the women have adopted a sedentary life. Besides, the peasants allow their children, even at the most tender age, the use, if not the abuse, of brandy and coffee, on the evils of which it is useless to expatiate.

I may be allowed to mention, in concluding this essay, as one of the endemic diseases of this country, that passion for spirituous drinks, which, for 40 or 50 years has increased among the working classes, and which is leading to the most deplorable consequences. It is a prejudice to believe that the inhabitant of the north requires excitants to resist the rigour of the climate; but, if this pretended hygienic necessity does not exist, it is not less true that cold climates develop a strong desire for spirituous liquors. Experience proves abundantly that the immoderate use of brandy becomes more common as we approach the north of Europe, in northern Russia, for example, in Scandinavia, and in Scotland; it would be unjust to attribute this wretched practice to want of civilization in the Swedish peasantry, or to an impairment of their moral and religious sentiments. The intellectual education and the moral training of the Swedish peasant do not place him in an inferior rank. The fault is rather in defective legislation, which encourages the manufacture of brandy; the price of spirituous liquors has been greatly lowered, and the consumption has increased in proportion. When we reflect upon the sad consequences of this state of things, is it not legitimate to hope that new legislation and other views of political economy will protect the future, and will effectually remedy this abuse, which I grieve to record as a disease among the endemic diseases of my country: the passion for brandy and its inevitable consequences?

ART. V.—*An Account of an Obscure Case of Prolonged Somnolence.*
By GEORGE W. HUNTER, M. D., of Harrisonburg, Va.

[The details of the following case, some account of which has been extensively circulated by the daily press, will be read with interest.]

August 31st, 1853. I was called upon to consult with Dr. Gordon upon the case of Araminta Ragan, a delicate girl of thirteen years, with a pale sallow complexion.

It appeared that after breakfast that morning, she had gone to sleep, and that when her parents attempted to awaken her, she was seized with a spasm, which was followed by a state of such profound insensibility, that the family supposed that she was dead. Her pulse could not be felt, and not the slightest respiratory movement was perceptible. When we arrived, the patient had revived somewhat, and we attempted to promote reaction by forcing brandy into her mouth, and by applying sinapisms to her hands, feet, and epigastrium. We learned that, upon the previous evening, she had eaten largely of indigestible food. After many efforts, we succeeded in administering about 12 grains of ipecacuanha, by introducing the medicine into her mouth, little by little, and then holding her head back until it tickled the fauces and produced deglutition. She vomited twice tolerably freely, and her consciousness then returned for half-an-hour or more, during which period she recognized those around her, but never spoke. On being asked, Where she felt sick? she answered by putting her hand over her stomach. She soon relapsed into her former somnolent state.

Dr. Gordon suggested that the symptoms might be dependent upon hysteria, and proposed the administration of gr. xxx. of valerian. This produced no appreciable effect.

Dr. Henning and Dr. S. M. Hunter visited the patient during the day; they coincided in the conclusion that we had finally adopted: that the disease originated in gastric disorder.

September 1st. The condition of the patient was little changed, except that the pulse had risen to 120; it was rather small and feeble. Her tongue, which she would put out when frequently asked to do so, presented a thin white fur; her respiration was natural. (*Hydrarg. chlor. mit., gr. x. ; pulv. ipec., gr. viii.*) This powder was to be followed in five hours by half-an-ounce of castor oil.

Sept. 2d. Several dejections; pulse at 80; skin warm and moist. The patient lies with her eyes closed; she has swallowed a little water and soup. Bread was given her, and she chewed, but did not swallow it.

Sept. 3d. I called to see Miss R——, and found her still asleep. Pulse at 80, and natural; breathing regular. The patient has the appearance of a person in natural slumber. It was decided in consulta-

tion that she should be cupped upon the temples. She was freely cupped, without any apparent change. She raised her hand and seized the glass during the operation.

Sept. 14th. I have seen Miss R—— nearly every day from the first of her sickness to the present time (more than two weeks). She has remained in the same semi-comatose condition during all this time. Within the last two or three days she has been moaning some, but she still sleeps. To-day, however, she opens her eyes and keeps them open for a time, but does not speak. Her pulse has for some days been growing gradually weaker, and her breathing has increased in rapidity. She is now, and has been throughout her sickness, perfectly rational. When asked to-day if she knew which was the Doctor, she smiled and turned her eyes towards me. She moans, and attributes her pain to the stomach. She is evidently sinking, and I have prescribed brandy and quinine, and a mustard plaster to the stomach.

Sept. 24th. The patient died on this day. Her strength had gradually failed during the preceding fortnight; no new symptoms had presented themselves, and nothing had occurred to throw light upon the nature of her disease.

Sept. 25th. *Sectio cadaveris, 24 hours after death.*—Dr. Glassell and I made the post-mortem examination in the presence of all the physicians of Harrisonburg.

Chest.—Adhesions of right pleura. Both lungs filled with tubercles, from the size of a grain of sand to that of a small pea. None of the tubercles were softened. Heart normal. Slight effusion of lymph in pericardium.

Abdomen.—The left end of the stomach was healthy; the pyloric extremity was slightly inflamed. At the junction of the stomach and duodenum, on the outside, we found a mass, which we all considered tuberculous, of the size of a hen's egg, and of cheesy consistence. The small intestines generally showed traces of high inflammation. The duodenum was of a brown colour; we supposed that this might be owing to the effects of the bile, and attempted to wash it away, but were unable to do so. The gall bladder was distended with bile, probably in consequence of the pressure of the tuberculous lump upon the ductus choledochus.

Encephalon.—The brain and its membranes were perfectly healthy, except that the superficial blood vessels were perhaps a little congested. The ventricles presented the same appearances, that I have seen in dissecting rooms, when I was a student. The base of the brain presented no abnormal alterations. The medulla oblongata and cerebellum were equally exempt from morbid appearances.

We concluded that the immediate cause of death in this case, was the inflammation of the duodenum and small intestines; the remote cause, the tuberculous depositions which excited the inflammation. I should not forget to remark that an hereditary tubercular taint existed.

As to the causes of the profound state of somnolence which lasted throughout the whole course of this singular case of sickness, a period of twenty-five days, I have no explanation to offer; neither shall I attempt to theorize upon the various obscure features which the case presents. I give this history to the profession, hoping that some solution will be found to an enigma, which baffled the sagacity of the numerous physicians who saw this patient during her illness.

ART. VI.—*A Report of a Case in which an Enlargement of the Isthmus of the Thyroid Body was successfully extirpated.* By GEORGE A. OTIS, M. D., of Richmond, Va.

There are cases of bronchocele in which the isthmus, or else the middle lobe or pyramid, of the thyroid body is alone enlarged. This species of goitre, although it rarely attains great size, frequently produces more serious symptoms than the most enormous growths involving only the lateral lobes. M. Cruveilhier records an instance, in which a central bronchocele forced the thyroid cartilage backwards until a true solution of continuity occurred in the pharynx in consequence of this compression.* The same observer has found, in these cases, thickening and disease of the trachea.† These considerations, and the fact that in central bronchocele the relations of the tumour to the great vessels and nerves of the neck are less intimate than in complete goitre, have induced surgeons from time to time, to extirpate these enlargements, and a number of cases are on record in which this has been successfully done.

The following case is another proof, I think, of the propriety, as well as practicability, of this operation.

CASE.—Mrs. C. G——, residing on Broad street, aged 26, a native of St. Gallen in Switzerland, of nervous temperament, of good constitution, the mother of two healthy children, presented a tumour upon the trachea, extending from the middle of the thyroid cartilage to within half an inch of the upper edge of the sternum.

The tumour was of the size of a hen's egg, or perhaps a little larger;

* VIDAL (de Cassis), *Pathologie Externe*, T. iii, p. 748.

† *Anatomie Pathologique du corps humain*. 35e livr.

it was first observed twelve years since ; it increased in bulk very slowly until the patient's removal to this country two years ago ; since that time it has enlarged rapidly, and, at this date, when the patient stooped, or made any violent exertion, it produced difficulty in breathing and swallowing, and considerable congestion of the head.

The tumour was very hard, of uniform spheroidal shape, and slightly elastic ; it was not painful when touched, and presented neither fluctuation, nor crepitation, nor arterial impulse ; it appeared to be adherent to the trachea, and did not allow of much lateral motion, but followed the movements of the larynx. It was not affected by the occurrence of the menstrual period.

The peculiar *feel* of the tumour, the absence of lobules or irregularities on its surface, and of any impediment in respiration, upon lateral compression, and the assurance of the patient that goitre was unknown in her native canton, induced me to conclude erroneously that I had to do with a fibrous tumour, notwithstanding the rarity of that species of morbid growth in this locality, and I determined to extirpate it.

Sept. 7th, 1853. The patient being placed under the influence of chloroform, I made an incision upon the tumour, and, detaching the fascia and expanded laryngeal muscles, dissected towards its base. After the tumour was exposed, it presented a glistening fibrous envelope, and several experienced surgeons who were present, considered it a simple desmoid tumour attached to the trachea only by condensed cellular tissue. During the progress of the dissection, the blood flowed freely from greatly enlarged arteries and veins, but was restrained, with some difficulty, by securing the former and one of the latter, with ligatures, and by compression with a sponge. Several large vessels were now, however, brought into view, and it was evident that any attempt to proceed farther with the knife was impracticable. It was decided, therefore, that an attempt should be made to strangulate the mass. Two needles armed with double ligatures were passed at right angles to each other as near the trachea as possible ; the loops were divided, and the eight ends of the ligatures were firmly knotted, each to the one next to it ; the portion of the tumour exterior to the ligatures was then removed. There was no farther hæmorrhage. The integuments were brought together by *serres-fines*, in order that the wound might be opened at a moment's notice.

On the following day there was some oozing from the lower angle of the wound, and several drachms of half-coagulated, grumous blood escaped. There was also some swelling, and considerable inflammatory tenderness, and the pain on deglutition was extreme. Everything proceeded favourably, however. On the third day, the wound had united except at its inferior angle, where the ligatures came out, and the *serres-fines* were replaced by adhesive strips. A free discharge was soon established, and quantities of pus and foetid, disorganized matter escaped from the inferior orifice of the wound. On the thirteenth day, all of the ligatures had come away. In less than three weeks there was a firm linear cicatrix. I saw this woman to-day (Oct. 26th,) free of

complaint, breathing easily in every posture, and presenting no vestige of a tumour.

An examination of the portion of this tumour which was removed, showed that it was composed of a dense fibrous envelope, nearly the eighth of an inch in thickness, enclosing a spongy tissue, composed almost exclusively of a congeries of enlarged vessels. The cellular structure presented little or no alteration. An examination by the microscope confirmed these appearances. The internal portion of the tumour closely resembled the parenchyma of the placenta, a similitude I borrow from Sacchi, who has noticed this species of goître.

I do not intend to enter upon an examination of the differences in structure observed in abnormal development of the thyroid body, for, as M. Cruveilhier says, "the tumours known under the name of goître comprise a whole pathological anatomy, varying as they do from simple hypertrophy to cancer." I may simply remark that the common forms of the disease have been classified as varieties of two primitive ones, *struma vasculosa* and *struma glandulosa*, corresponding with the two anatomical elements of the thyroid body. It was evident that the tumour we have described belonged to the former class. As to the fibrous envelope of the tumour, I presume it was the original fibrous tissue of the isthmus, gradually expanded and thickened, as the vascular hypertrophy progressed.

The idea of removing goître by the ligature, is attributed by Valentine to Moreau, who operated in two cases, successfully in one, in the other unsuccessfully; the failure was due probably to the nature of the tumour, for it was a carcinoma. Buninghausen also successfully extirpated by this method a tumour closely resembling the one I have described. Desault* employed it in 1791 to complete an operation upon a complete goître, which he could not safely remove with a cutting instrument. Liston reports a successful extirpation† of a central tumour, by a combination of excision and deligation, and several cases‡ in which he removed large portions of complete goîtres by the same methods. A few similar cases are reported by Velpeau. M. Mayor has operated several times with success, but two of his patients succumbed. Dr. Hedenus, of Dresden, has successfully removed the thyroid body six times.

* *Œuvres chirurgicales.*

† *Elements of Surgery.* 2nd Eng. ed. p. 469.

‡ *Practical Surgery.* 2nd Am. ed. (by Dr. Norris,) p. 330.

I believe that when internal and hygienic remedies have been tried in vain, and a goitre without extensive attachments menaces the life of a patient by compressing the trachea, the surgeon is justified in removing it. This, however, is a grave operation, and should only be undertaken with the approbation of enlightened colleagues, and an entire conviction of its necessity. Every one will comprehend, in fact, that a ligature enclosing a large mass in this region, must cause difficulties of respiration and deglutition, and intense pain and oppression; that there must always be great risk of purulent infection, and of the entrance of air into the veins in operating so near the heart, and that important displaced nerves and blood vessels are liable to be wounded.

The large arteries which supply the thyroid body do not enter its interior, but subdivide upon its circumference; a great many branches are therefore divided, and this multiplicity of bleeding orifices is one cause of the incontrollable nature of the hæmorrhage in these cases.

As soon as the threads are tightened, the surgeon should hasten to remove the portion of the tumour anterior to the ligature, lest the gangrene which must inevitably supervene upon the strangulation of so considerable a mass of tissue, should cause fatal infection and symptoms resembling the putrid fever of the ancients.

PROCEEDINGS OF MEDICAL SOCIETIES.

MEDICAL SOCIETY OF VIRGINIA.

The first semi-annual meeting of this association was held at the Town Hall in Charlottesville, on October 25th, the President, Dr. ATKINSON, of Danville, in the Chair. The attendance was meagre. At four o'clock, a quorum (20 fellows) not being present, the Society adjourned until half-past seven.

At that hour the Society being called to order, the President volunteered an address, which indicated that, although his attention had been for many years devoted to other pursuits, the President still cherished a warm sympathy for the interests of the medical profession. We have not space for the whole of this interesting document; we can only notice a few points in it. After a feeling tribute to the memories of those members of the Society who had died since the last meeting, the

President informed the association that they had an Herculean task before them, and that Humanity was looking on to see them accomplish it. From the context, we are led to suppose that this "Herculean task" consisted in part, in the annihilation of "the destructive systems of quackery, whose absurdities are as patent, as their nostrums are patent." If so, we must regretfully express our doubt of the ability of the thirty gentlemen assembled at Charlottesville to compass this desirable end. Certainly the task will be more difficult than the second labour of Hercules, for Dr. Atkinson does not limit the number of systems of empiricism to be destroyed to 100, which is the number of heads attributed by Diodorus to the Lernæan Hydra, but announces, in his next paragraph, that new systems may be established at any time, competent to *overthrow* the whole structure of legitimate medicine.

"Nothing is easier, in these days of boasted progress, and advancement in knowledge and science, than to establish a system in Medicine which shall overthrow *all that was taught* by Cullen, and Sydenham, and Rush, and Johnson, and Chapman. A modicum of ingenuity, a large stock of impudence and a total want of principle, are all that is required to accomplish the work."

We were not prepared to believe that the

"Towering pride of twice a thousand years, "

could be demolished with such facility.

We omit several choice selections of poetry, and a number of facetious anecdotes, including the novel and ingenious repartee of a gravestone manufacturer to a dealer in quack-medicines, and also various illustrations of the effects of credulity and superstition in impeding the progress of medicine, (referring the curious reader for full information on these points to the first part of *Paris' Pharmacologia*,) to proceed to notice the reforms advocated in this address. The President presents a melancholy contrast between the "process of preparing candidates for the doctorate, thirty years ago, and now." Whilst we applaud the censures which the President liberally bestows upon the "disgraceful competition among the Medical Schools," we consider his description of medical education in the present day, somewhat exaggerated. The truth is, perhaps, that at no period of the World's history were there ever so many highly cultivated physicians as now, but on the other hand, that the number of ignorant medicasters has increased to an appalling extent.

The President goes on to advocate the establishment of a State Medical Journal, "in which each member should feel that he had a personal interest," which could be supported "without in any manner impairing the prosperity of any existing co-labourer in the good cause." The Society subsequently adopted this suggestion. We can therefore only hope that it will result in the organization of a good medical journal, "*munus Apolline dignum*," which will advance the interests of Medicine in Virginia. We trust also that those who have been active in promoting this enterprise, which must, necessarily, im-

pair the prosperity of journals already before the public, will place themselves above all suspicion of private motives in their action, by declining any salaried offices in connection with the enterprise.

After referring to the necessity of legislative action in relation to the adulterations of drugs, the President approached the important subject of Medical Education. He regarded the Medical Department of the University of Virginia as an admirable institution, so far as preliminary instruction was concerned, but thought it necessary that a great school should be built up in the Metropolis of Virginia, where Southern students might be taught the more advanced branches of Medical Science, and might be, above all, instructed in clinical science. When this should be done, Virginia would be recognized, not only as the "mother of illustrious statesmen," but as the "nursing mother of eminent physicians."

At the conclusion of this address, the Society proceeded to business:—

Dr. MAUPIN, from the committee on nominations, recommended the following physicians as Fellows of the Society:

Drs. Shelton and Wingfield, of *Warren, Albemarle*; Drs. Hughes, Poindexter, Hicks and Bramham, of *Charlottesville*; Dr. Lindsey, of *Scottsville, Albemarle*; and Dr. Martin, of *North Garden, Albemarle*.

The Society proceeded to ballot upon these recommendations, and all the gentlemen named were unanimously declared Fellows of the Society.

Dr. BOLTON, Corresponding Secretary, stated that the following gentlemen, Fellows of the Society, had sent in their resignations, viz:

Drs. Beck and Carmichael, of *Fredericksburg*; Dr. Mason, of *Henry county*; and Dr. Funsten, of *Clarke county*.

On motion, the resignations were accepted.

Tribute to the Memory of Dr. Watson.

Dr. BOLTON moved the following resolutions, which were unanimously adopted:

Whereas, it has pleased an Almighty Ruler to remove, by death, our friend and associate, Dr. GEO. WATSON, therefore,

Resolved, That by the death of Dr. GEO. WATSON, this Society has lost one of its most respected and valued members, who, by his high-toned, gentlemanly bearing, and by his love and veneration for our noble profession, has left an example to which we may point every medical student as worthy of imitation.

Resolved, That in token of our sympathy with the family of our lamented friend and associate, a copy of these resolutions be forwarded to them.

Tribute to the Memory of Dr. Clarke.

Dr. PETERFIELD TRENT, with a brief and feeling address, introduced the following preamble and resolutions, which were unanimously adopted:

Having, by Divine Dispensation, been bereft of our friend and associate, Dr. WM. J. CLARKE, who united to talents of the highest order, an abiding love of virtue, an amiable disposition and amenity of manners, which never failed to secure him the respect of all who knew him: therefore, be it *Resolved*,

1st. That we deeply deplore the death of our lamented friend and companion, who has been so suddenly cut off in the vigor of life, and in the midst of bright prospects of usefulness and professional honor.

2. That a copy of these resolutions be sent to the family of the deceased, as an expression of our profound sympathy in their sore bereavement.

3. That a copy of these resolutions be entered upon the records of the Medical Society of Virginia, and that they be published in the Stethoscope and the Virginia Medical and Surgical Journal.

The PRESIDENT was requested, by a vote of the Society, to prepare suitable resolutions in expression of their sense of the loss to the profession and to the country, in the death of Dr. CHAPMAN, of Philadelphia.

Dr. GOOCH stated that the office of Librarian and Curator of the Society was vacated, by the death of Dr. Clarke, and he moved that the Society proceed to fill it; which motion being agreed to, he nominated for the office *Dr. Peterfield Trent*.

Dr. PETICOLAS nominated *Dr. Mayo*, of Richmond, who declined the honour.

Dr. TRENT was elected.

On motion of Dr. GOOCH,

Resolved, That a committee of three be appointed, to enquire into the expediency of memorializing the Legislature, in the name of this body, or to take such steps as may be deemed efficient, to secure a proper Coroner's System for the State, and also to place the medical witness or expert, upon a more favorable footing than he now is, under the statutes of Virginia—and report in the morning.

Drs. Gooch, Stribling and Walke were appointed a committee, in pursuance of the resolution.

Dr. BOLTON offered the following resolution:

Resolved, That this Society appoint a committee, whose duty it shall be to urge upon the Legislature the passage of a bill, requiring that *the vendors of all secret nostrums* be required to put on each package of their medicines a printed label, in plain English, stating the ingredients of which it is composed.

The resolution was adopted, and Drs. Bolton, Leitch and McCaw, were appointed a committee to carry out its objects.

Dr. McCAW offered the following resolution, which was somewhat modified at the suggestion of Dr. STRIBLING, who thought in its original form it might imply defects in the medical education of Virginia, which he was not prepared to admit:

Resolved, That a committee of — be appointed who shall take into consideration the present condition of medical education in Virginia, and if defective, report some remedy for the same.

Doctor McCAW stated his object to be to get at something tangible. We had been told in the speeches of the different Presidents of the Society that there were radical defects in medical education; that there was something wrong in the medical education of Virginia. Now, if these representations were not mere phantoms, mere chimeras, it was time we should know what the defects were.

Dr. GOOCH opposed the resolution on the ground that it would be productive of discord and do no good. He invited gentlemen to reflect upon the position they would place themselves in by adopting the resolution. Was that society, which could not get a quorum, to undertake to speak for the whole profession of Virginia, as to what were the defects of medical education in the State—and how to prevent our young students from going abroad for their medical education? Were gentlemen prepared to speak out boldly and to identify and name schools? Would they report upon the school known as the “one professor School,” and another as the two or three professor school, etc. He hoped they would consider well what they were about to do, before they adopted the resolution.

Dr. ANDERSON was tired of this outcry in regard to the want of qualification of the present day. He believed that the majority of physicians were better educated now than they were thirty years ago. He hoped that the resolution would prevail. He wished to see a school established which would retain students within the State; he therefore desired to hear the whole subject discussed, and to learn what the defects were which prevented our schools from succeeding. If Dr. Atkinson's position was correct, students flocked to the northern schools, because of the facility with which students obtained there their diplomas, and the poorer and less exacting the school, the greater its number of students. If this was true, our Virginia schools must be superior to most others, for their classes were uniformly small; and Randolph Macon must be pre-eminent, for it had only ten students.

Dr. CRAIGHEAD was opposed to the resolution for views similar to those expressed by Dr. Gooch. He wished to avoid anything that would tend to discord in the profession.

Dr. McCRAW could perceive no ground of excitement or discord in his resolution. For himself, he was perfectly clear from vexed questions and disputed points. He wanted simply to see if the Medical Society of Virginia could not put Medical Education upon a better footing. He hoped he would not be understood as stirring up a cauldron which may have been once disturbed. We had too long heard of defects, not to enquire what they were. If there was a “One Professor School,” or a “Three Professor School,” were they not defective? His desire was to mark these defects first, and then to do something to give a good Medical School to Virginia. He expressed his surprise at the course of Dr. Gooch, who had laboured earnestly for the society, and had written a great deal in favour of a school based upon the society.

Dr. GOOCH admitted that he had gone for a school based upon the society; but denied that he was in favour of a charter for a new institution in Virginia. He had not been and would not be in favour of a new charter, unless he was forced from his position by the unalterable selfishness of somebody. In that case he would go for chartering anybody and everybody; for opening the field to competition, and *leaving it to the longest pole to take the persimmons.*

Dr. BOLTON opposed the resolution for the sake of harmony. A si-

milar resolution had produced discord in a former meeting of the society, and he apprehended a like result from that now proposed.

Further remarks were submitted by Drs. McCaw and Anderson in favour of the resolution, and by Drs. Gooch and Bolton in opposition.

In the course of the debate, Dr. Gooch corrected himself with regard to the "one professor school." He stated that although so dubbed, it had *two professors*. The President in regard to a remark from Dr. McCaw, disclaimed having spoken of medical education in Virginia as defective. He was perfectly satisfied that it was a great deal better than that of the Northern Institutions.

Dr. McCaw's resolution was adopted, the blank being filled with *five*, and Drs. McCaw, Stribling, Minor, Walke and Anderson, were appointed the committee to carry out its objects.

Dr. Bolton proposed that the committee should be instructed to report at the next meeting of the society, in April, 1854; he considered that it was due to the society, and to the committee, that such an important report should not be prepared in haste.

Dr. McCaw strongly opposed this suggestion, which it was evident, would effectually defeat the objects of the society had in view. If the report was postponed until April, the legislature would have adjourned, not to meet again for two years, and all the influence which the association could exert, would be destroyed.

The society then adjourned.

Wednesday, 11 A. M. The society met, the President in the chair.

Dr. Bolton from the committee for the publication of a medical journal, proposed the following "scheme" for that purpose:

The Journal shall be edited by a corps of seven competent individuals, to be chosen annually by the State Medical Society. It shall appear Quarterly, in January, April, July and October—each number containing one hundred and ninety-two pages, making, at the end of the year, a volume of seven hundred and sixty-eight pages.

To each of the editors a particular department of medicine shall be assigned, and no article shall appear in its columns which is not approved by all.

By this arrangement the subscribers will have a satisfactory guarantee that no inferior matter will ever disgrace the work, but that they may look to it with confidence for information on which they may rely.

The price of subscription will be *contingent on the number of subscribers*, but will in no case, exceed *four dollars per annum, in advance*.

Dr. McCaw enquired whether the committee were confident that they could carry out their plan without involving the society deeply in debt. He suggested that the society being a chartered body could be sued for debts contracted in its name. He thought that the gentlemen present should be cautious how they involved the whole society* in a transaction which might result in considerable pecuniary loss. He also thought it proper that an opportunity should be given to the editors of

*The number of fellows present at Charlottesville, was under 30; the Medical Society of Virginia has over 300 fellows.

medical periodicals at present established in the State, to part with their journals to the society.

Dr. ANDERSON asked if a journal, instituted upon a plan similar to the one proposed by the committee, had not been already attempted at the North, and if it had not signally failed. He also asked if this meeting was not too small to justify action on such an important measure as was now proposed.

Dr. BOLTON was perfectly satisfied that this plan could be put into operation without any risk of pecuniary loss to the society, and he could assure the gentleman that he would not be called upon to contribute a single cent to the enterprise.

The committee on the Journal were continued, and were instructed to endeavour to have the work issued by January 1st.

On motion of Dr. WALKE, of Chesterfield, the Executive Committee of the Society was charged with the duty of appointing editors, and regulating the details of this enterprise, until the annual meeting of the society, in April, 1854.

Dr. GOOCH, Chairman of the Committee on the subject of Coroners, made a report, which recommended that the society should appoint a committee, to urge upon the legislature the importance of appointing physicians to that office.

The report of the committee on Medical Education being called for, the chairman, Dr. McCaw, reported mainly as follows:—

The committee appointed by the Medical Society of Virginia to take into consideration the present condition of medical education in the State, and, if defective, to propose a remedy for the same, beg leave to present the following:—

Your committee think that the State wants a medical exponent, that the profession wants a representative medical science, that the medical student wants a great school, at which he can obtain a perfect and complete medical education. These are the wants of the State, the profession, and the student, and it is the duty of the Medical Society of Virginia, if possible, to remedy these defects.

The State has already a medical organization, to be found in the medical department of its University. That institution deserves, and we hereby accord to it, our most cordial approbation, for its thorough and complete course of education, which has given to its students a high position in those colleges which they have subsequently attended. But this institution as at present situated, can never be a complete and perfect medical university, owing to its inland position, and the impossibility of giving to its students that amount of practical knowledge which we all recognize as essential to the formation of a thorough medical education. We also fear that any attempt to transfer this institution to the only point in the State where such instruction could be obtained, might greatly impair its present usefulness. We therefore prefer that it should remain as it is at present, and be held by the profession as the great preparatory school of the State.

Your committee suggest that the Medical Society of Virginia, through the medium of a committee, should ask the legislature at its ensuing session, to found in Richmond a State Medical School, to be governed by a board of regents or visitors, consisting: of the five judges of the Court of Appeals; of the president of the State Medical Society, and a person appointed by the president and directors of the literary fund. Such an insti-

tion, under the control and direction of a body of men so completely above all suspicion of either personal, political, or sectarian influences, must obtain the confidence of the State, the profession, and the public, and would, in our opinion, retain within the State the multitude of students who now throng the lecture rooms of northern institutions. Therefore:

Resolved, That the Medical Society of Virginia most cordially approves the plan for the organization of a State Medical College in Richmond upon the plan proposed above.

Resolved, That a committee of———be appointed, and instructed to memorialize the legislature at its ensuing session, and, by every other legitimate means, to carry out the above objects, and to appeal to every member of the Society to aid them in attaining the ends proposed.

Dr. McCaw, after reading this report, remarked that the profession agreed that a State medical school was needed, and that Richmond was the only point at which it could be advantageously established. The great difficulty with the committee had been to select a governing power for that school which should be beyond the reach of personal, political, or sectarian bias. The profession would never support an institution which was not free from these noxious influences. He hoped that the board which was proposed would be satisfactory. It was chiefly composed of five judges, elected by the people from the five grand divisions of the State, for so long a period that they were beyond the reach of any political questions which might arise. They had been already selected for their impartiality, honesty, and decision of character, and the profession could hardly do better than to commit their interests to them. The profession was represented by the president of the State society, and the State appointed a regent, through the directors of the literary fund.

Dr. Gooch thought that the number of medical men upon the board was too small. He moved that five fellows of the State medical society should be added to the board of regents.

This motion was negatived.

Dr. Gooch then moved that the "licentiate board bill" should be tacked to the present scheme, and hoped that they would sink or swim together.

Dr. McCaw opposed this amalgamation. There was already a special committee charged to urge upon the legislature the necessity of a licentiate board, a committee of which Dr. Gooch was chairman. He (Dr. McCaw) preferred that both measures should stand upon their own merits.

Dr. Bolton opposed the plan proposed by the committee because it was simply absurd. It would not prevent students from seeking medical instruction in other colleges in the State which were defective. Again he thought that the proposed board might be influenced by political, private, and sectarian feelings, and lastly, he thought that such a State school would not succeed *under any circumstances* because of the superior advantages of northern colleges, derived from the number and size of the hospitals and public charities to which their students had access. He mentioned particularly the great clinical advantages of New York city.

Dr. McCaw said that Dr. Bolton's *dictum* that the plan of the committee was absurd, was not worth a copper. As to the reasons he offered for his opinion, they were not very cogent. Certainly there was no means of coercing students to attend any school, but by offering them superior advantages, we made it for their interest to attend the one founded by the State. He thought that no reasonable man could attribute to a board constituted in the way proposed by the committee any improper motives or prejudices.

If the gentleman really believed it impossible to build up a good medical school in Virginia, which seemed to be his last argument, he (Dr. M.) believed that it was only necessary to point to the noble literary institution now in view to refute such an opinion. He believed it superfluous to argue before a body of Virginia physicians, the possibility of their succeeding in any enterprise which they might unitedly and persistently make.

The question being taken upon the adoption of the report, a division was called for.

Drs. Bolton and Gooch voted against the report.*

The committee having neglected to fill the blanks in their report, the document was reconsidered *for that purpose*.

Dr. GOOCH endeavoured to amend the resolutions appended to the report by moving that *six* additional visitors from the Medical Society should be added to the board.

The PRESIDENT pronounced Dr. Gooch out of order. Dr. GOOCH appealed from this decision.

The Society sustained the chair by a large majority.

The number of members on the committee on medical education, which had been left blank, was then fixed at *seven*.

Complimentary resolutions were then passed in regard to the hospitable physicians of Charlottesville, the faithful officers of the Society, etc.

The Society then adjourned.

We regret to add, that, so far as we have learned, not a single scientific question was mooted during the session.

MEDICO-CHIRURGICAL SOCIETY OF RICHMOND.

September 6th. Dr. Dove exhibited a gall-stone, three-quarters of an inch in diameter, and detailed the history of the patient from whom it was obtained. No analysis of the ingredients of the concretion was mentioned.

Dr. D. observed that it had been asserted: "*propter solum uterum*"

* Our informant was doubtful whether or not Dr. Carter voted in the negative.

mulier est id quod est;" he would now say: "propter solum glandulum fellis homo est id quod est, the gall being intended, with the aid of the pancreatic fluid, to animalize the chyme in the duodenum, and fit it for an entrance through the lacteals into the thoracic duct, whence emptied into the subclavian vein in the form of purely animalized chyle, it passes directly and pro forma into the heart, to become blood, which is the *vita hominis*, or living principle of the animal,"* any abnormal condition of the gall would necessarily disorder the functions of the entire economy.

Dr. Dove next presented to the society, a bit of bone which he had removed from the rectum of an adult. He discussed the mode of transit of this foreign body through the intestinal canal. Such substances, he remarked, were usually detained in the stomach until the gastric juices had partially dissolved them, and removed their asperities. In this instance this salutary process had not occurred. "How this bone could pass the several sphincters, and finally the convolutions of the intestinal canal, without being arrested and creating intense pain, was wonderful indeed."† Dr. D. explained this remarkable phenomenon, by supposing the existence of *a certain amount of intellectuality of the bowel*, a diffused sensorium, whereby the intestine was capable of discriminating between its different contents. The bowel evidently knew the difference between its normal contents, fæces, chyme, etc., which were propelled by the proper peristaltic movements, and foreign substances, whose passage, on the contrary, was facilitated by an expansion of the bowel under the influence of this diffused sensorium. The walls of the intestine, usually in apposition, dilated, in order that the delicate mucous lining of the tube should not be lacerated by the jagged prominences of such bodies as the one he now exhibited.

After this case was read, a discussion arose upon the physiological explanations offered by Dr. Dove.

Dr. Wilson did not entirely agree in them. He recognized a general sensibility of the internal organs, and a certain power of discrimination which they possessed, a power to which the epithet *ψυχή* had been applied, but he could not admit that this influence was capable of causing such actions as Dr. Dove seemed disposed to attribute to it.

Dr. McCaw observed that he could not agree in the strong expressions which had been employed in regard to the participation of psychical operations in purely organic functions. These cases of the passage of indigestible substances through the alimentary canal were very common; in almost every case the detention of the foreign substance occurred at the *sphincter ani*. If the bowel possessed the intellectuality which had been attributed to it, he (Dr. McCaw,) considered it strange that it should retain its senses to within an inch of its termination, and there make an ass of itself. Such a doctrine reminded him of an anecdote related by Professor Pattison, of a medical student, who, being asked what passed through the *foramen magnum*, replied:

* Stethoscope, October. Page 568.

† *Op cit.* Page 569.

the œsophagos ! Well, rejoined the professor, I fear, my young friend, that you have swallowed your brains. He (Dr. McCaw,) could not understand how Dr. Dove's patient had acquired the power of voluntary action of the intestinal muscles, unless he had swallowed his brains. He thought that the mechanism of the passage of bones and other foreign matters through the bowels was very simple. Such bodies were taken up by the alimentary bolus, and passed through the intestine in company with the food ; they might be temporarily detained at the coecal valve, but after overcoming this obstacle, they passed readily along the large bowel, until they were finally arrested by the sphincter.

CHRONICLE OF MEDICAL SCIENCE.

The translations and abstracts under this head, are made expressly for this Journal.

MEDICAL PATHOLOGY AND THERAPEUTICS.

1. *A Lecture at Hôtel-Dieu on Scarlatina.* By M. TROUSSEAU.

Scarlatina is a contagious exanthematous pyrexia like variola and rubeola, but of a more recent origin than these. It was long confounded with measles, and appears to have been carelessly studied by the authors who wrote at the time it first arose, even by Sydenham, who must have observed only epidemics of the disease of a mild and far from characteristic kind. Scarlatina was studied much more closely by the authors of the last century, at the period in which it ravaged France, and it has been studied still better by the physicians of our own day, among whom M. Bretonneau deserves especial mention on account of the short but admirable dissertation on this subject, which he has published in the *Journal de Medecine*.

Scarlatina, according to the usual divisions, should be examined in its periods of invasion, eruption, and desquamation.

The period of invasion is excessively brief compared with what is observed in other exanthemata. In fact, whilst this period is protracted for two days in confluent small-pox, three days in discute small-pox, from three to seven days in rubeola, it only lasts an hour or a day at the most in scarlatina. I understand by the period of invasion the moment at which the patient perceives the action of the morbid principle from the appreciable disorders of his health, which succeeds that other period which transpires without derangement, without gene-

ral disturbance, and which is called the period of incubation. This period of invasion lasts then from the apparition of the earliest general derangement until the moment at which the disease is well pronounced.

The consideration of the duration of this period, this sudden invasion in the majority of cases, is of great assistance in the diagnosis; for, in some cases of these eruptive diseases, the distinctive features are appreciated with difficulty, and this one of which I speak, is altogether characteristic.

This period of invasion in scarlet fever is moreover accompanied by several phenomena which it is well to note, since they serve still farther to distinguish the disease from variola and rubeola. In the first place, the intensity of the febrile movement is greater than in other exanthematous pyrexiae. The first day, the pulse rises to 120, 140, or 160 beats in some individuals, or in infants even to 200. It is not unusual to observe at the same time symptoms of malignity, consisting in subsultus tendinum, dryness of the tongue, incrustations on the teeth, suppression of the urine; and these symptoms occur sometimes on the first day, whereas they are rarely or never encountered in small-pox or measles. In a word, from its very onset, and as soon as it takes possession of the organism, scarlatina manifests a character of malignity which is peculiarly its own.

Another important character, which almost always appears in the course of the first day, sometimes in the first hour after the invasion, is the *pharyngeal* sore-throat, which differs from the *laryngeal* sore-throat of measles, which does not come on before the second or third day, and from the sore-throat of variola, which does not appear until a more advanced stage, when the pustular eruption has broken out. The pain of the angina of scarlatina is more intense also, which distinguishes it still farther.

The eruptive, or second stage of this disease, extends from the first to the fifteenth day; although in the majority of cases it does not transgress the eighth or ninth day. In assigning it a period of evolution protracted to fifteen days, I wish to give you the measure of its irregularity.

Scarlet fever is, of all the exanthemata, the one in which the eruption is the most irregular. Thus it is sometimes so fugitive, that the physician may see it in the morning, and fail to find it again at night. At other times, on the contrary, it lasts uninterruptedly until the fifteenth day, and can be readily perceived at that advanced period. This feature is not observed in small-pox, in which the eruption presents such regularity in its progress, that we may tell the number of days the disease has lasted by examining the pustules, nor in measles in which the eruption fades on the seventh day, and disappears on the ninth.

The eruption appears first upon the face; it is far less lively than

that of measles.* It is betrayed by a slight tumefaction of the face, accompanied by a streaked (*vergetée*) redness, which resembles that which is produced when the skin is struck by an uneven surface, as the hand, for example. This redness, diffused unequally over the cutaneous surface, presents still another notable peculiarity; whilst one cheek, or one side of the neck may assume the hue of the eruption, the same parts on the opposite side will remain pale and colourless.

The eruption commences thus upon the face; subsequently it is perceived upon the lateral portions of the neck, and upon the flexures of the joints successively. When it is examined on the body, we find that it possesses other characteristics than upon the face. Upon the neck are excessively minute red points, which differ from those of measles in their regularity; and whilst, in rubeola, the spots are lenticular, and arranged sometimes in patches of a light red, the eruption in scarlatina, consists of little points, of a deeper colour, analogous to raspberry juice. Therefore, whilst in measles the white intervals between the patches are the rule, (sometimes they are absent) in scarlatina the redness is generally deeper and more uniform.

If we examine the lateral portions of the neck, and especially the chest and abdomen, we shall find developed there acuminated vesicles, containing at the commencement, and until the second or third day, only a limpid serosity, which becomes lactescent on the fourth day, and subsequently purulent; at the same time, they become flattened and form bullæ, which in some cases are confluent and occupy the whole surface of the body, as in miliary scarlatina. On the hands, the eruption is sometimes accompanied by considerable swelling. By the second day it has successively invaded every part; on the fourth or fifth day it is at its greatest intensity.

Simultaneously with the skin, the palatine arch, the tongue, the pharynx, and the internal surface of the cheeks assume a scarlatinous hue; the gums are covered with whitish concretions, like those observed in typhoid fever, but more apparent. The tongue, which is swollen on the first day, becomes red at the edges, and coated with a creamy fur in the middle; as the disease advances, the red border extends, and on the fourth, fifth, or, at the farthest, on the sixth day of the eruption, the epithelium rises like the finger of a glove; the papillæ are erect, and give the tongue a rough aspect; the pain of which it is the seat, is evinced upon the ingestion of the slightest sapid substance. Meanwhile the disease progresses; the epithelium resumes its natural condition, and the pain ceases, and towards the tenth day, the tongue, though still red, does not present its specific appearance.

This particular sensibility of the tongue which causes it to develop so aptly the scarlatina eruption, extends to the pharynx, and palatine

* This is opposed to what is taught by most English authors, and to our usual comparison of the rashes of scarlet fever and measles to the colour of boiled lobsters and the tint of raspberries respectively. Huxham always described the eruption of *scarlatina* by the colour of raspberry juice. Of course every one must decide upon the value of these similitudes from his own observation.—[Ed.]

arch, organs which like it have a very vascular constitution, and which go through the same gradations and phases. All of these disorders are attended with engorgement of the cervical glands, which is the cause of the scarlatinous buboes noticed at the decline of the disease. The fifth or sixth day, the tonsils are covered with a white secretion, sometimes so thick as to impede the act of deglutition; at the same time, the arch of the palate becoming tumefied cannot act, and adds still more to the impediment, rendering impossible often to swallow even fluids, which return by the nose. This complication sometimes persists six, eight, and even ten days.

The eruption is accompanied with general complications: vomiting sometimes comes on at the beginning and lasts five or six days, and is often attended or followed with diarrhœa. When these accidents cease, the abdomen swells, and becomes dry and hot. The malignant symptoms which show themselves at the beginning persist during the eruption. At night the patient is a prey to delirium, during the day to hallucinations; coma more and more profound follows the delirium; at times there is subsultus tendinum, and, in a word, the whole category of the ataxo-dynamic symptoms of pestilential affections and grave typhoid fevers.

From the ninth to the twelfth day, the third period or that of desquamation commences. When the disease is limited to angina, and when there is little or no efflorescence of the skin, desquamation is not observable; on the contrary, when the cutaneous eruption is abundant, it assumes a particular character, as in eczema; the epithelium, mainly that of the extremities, is raised up in large scales, and preserves the mould of the part from which it detaches in the same way as in the desquamation of serpents. No other eruptive fever presents this phenomenon. Sometimes on the first day, even before the eruption appears, the scarlatinous sore throat is prominent, and ordinarily completes its evolution in ten days, disappearing about this time, the white concretion upon the tonsils falling off at the same time. At other times, the sore throat, after remaining stationary and even seeming to cease, takes on suddenly at this epoch considerable exacerbation; the glands about the angle of the jaw and the neck become tumefied; the fever is rekindled, the delirium returns, the tongue becoming dry and covered with fuliginous secretion. The swelling of the cervical glands becoming enormous, gains the neighbouring cellular tissue, fluctuation follows, and an opening gives egress to an ichorous pus followed by furuncular suppuration and gangrene. In the case of a young boy in whose neck one of those abscesses was opened, the quantity of cellular tissue which mortified was so considerable that the internal jugular, the carotid artery and thyroid gland were exposed at the bottom of the wound. Notwithstanding the extent of the disorder, the patient got well, though left with an enormous, unsightly cicatrix on the neck. Sometimes the mortification invades the walls of the veins, and hæmorrhage and death are the immediate result. The scarlatina bubo is not confined exclusively to the neck; it sometimes exists upon some portion of the extremities.

It is very common to see children, after an eruptive disease, present a bloated face; in *rugeola*, this phenomenon is without gravity; in *scarlatina* it is the prelude of a general *anasarca*, which is often fatal. It announces that the urine has undergone a modification in its composition, and this modification ought to be watched by the physician, for it furnishes excellent prognostic and diagnostic signs. In fact, if the urine be examined at this period, it will be found to have acquired a vinous coloration, sometimes red and bloody, resembling water in which meat has been washed. At the end of a few hours, if the urine be set aside in a conical vessel, the blood globules may be seen upon the sides and at the bottom of the vessel. If it be tested with nitric acid or heat, an albuminous deposit is observed, and when the acid has remained some time, the liquid assumes a brown or blackish colour, showing decomposition on the part of the blood globules and albumen. Sometimes the discoloration of the urine is not present, yet it will be found to contain albumen.

The general *anasarca* which accompanies scarlatinous albuminuria does not follow the same course as in Bright's disease. It attacks the whole body in from 24 to 48 hours, and at the end of this short time distends it as in the most advanced cases of Bright's disease. This *anasarca* is sometimes spontaneously cured; nevertheless in some cases the termination is effected in different ways, the worst of which is *eclampsia*. An adult suffering from scarlatinous *anasarca* is apparently in a comfortable condition; he has no fever or serious complication. Suddenly, however, he may complain of pain in the head, troubled vision, etc.; from this time you may make an unfavourable prognostic, for grave symptoms are going to show themselves. In fact, after these apparently light symptoms have lasted a certain time, a violent attack of *eclampsia* supervenes, followed by new attacks frequently repeated and which kill the patient in ten or twelve hours. Sometimes a single attack suffices to bring about the fatal termination. This state, resembling the albuminuria of pregnant females, ought to make the physician attentive to the phenomena developed in the course of scarlet fever, for it often happens that the dropsy of pregnant women, indicating the imminence of *eclampsia*, causes us to adopt means to prevent this complication. Frequently with children the pain in the head and dilatation of pupils escape our notice; our strict attention therefore to the course of the disease is of the utmost importance.

Sometimes dropsy of the glottis determines death, by producing a sort of paralysis of the arytheno-epiglottic ligaments. Its imminence is recognized by characteristic signs, such as the croupy cough and stridulous respiration; the touch detects swelling about the superior opening of the larynx and the epiglottidean ligaments. This accident, however, is more rare than that of *eclampsia*. Death may ensue from the albuminuria passing from the acute to the chronic state, in spite of the best attentions; but this result may be foreseen when the *anasarca* persists for a month.

Another frequent accident is the scarlatinous rheumatism, which attacks more than a fourth of *scarlatina* patients; it comes on suddenly

during the decrease of the disease; tumefaction and fluctuation are present in the joints; the fever is rekindled, uneasiness about the region of the heart, and a combination of symptoms which leave no doubt upon the nature of the complication. If the parents of a child suffering from rheumatism be questioned, they will often say that it was after or during the convalescence of a scarlet fever that the first attacks were noticed. Another fact going to prove it, is that spontaneous acute articular rheumatism, very rare with children, is very common with adults, while scarlatinous rheumatism is much more common with children than adults.

While acute articular rheumatism, not succeeding scarlet fever, is not grave except from secondary cardiac lesions, the rheumatism following a severe attack of scarlatina becomes mortal, because the scarlatina brings about a general condition analogous to that of puerperal fever, characterised by a tendency to suppuration in the affected articulations. In such cases delirium soon comes on, the patient succumbs, and pus will be found in all the articulations.

Treatment. When the disease follows a simple and natural course and there are no complications, the physician ought to be a spectator only: if he plays an active part it is to the prejudice of the disease, and he ought not to interfere unless when complications arise, or when some phenomenon proper to the disease becomes menacing by its intensity, and consequently is a complication. This is the course I pursue in scarlatina. The patient is kept in bed without being smothered in covering, but in such conditions as to suffer neither heat nor cold; the air of the apartment ought to be agreeably fresh, and the cleanliness of the body ought to be rigidly observed as well by lotions as by change of linen.

In the acute stage of scarlatina, the nervous symptoms constitute one of the gravest symptoms. They are announced by an excessive heat of the skin, by an unusual frequency of the pulse, by insomnia; then delirium, jactitation, coma, distension of the abdomen, subsultus tendinum, dryness and trembling of the tongue come to complete the category. In this condition, calomel, *fracti dosi*, five grains a day divided into ten doses, acidulated drinks, etc., render signal service; but the medication *par excellence* is the cold affusion, a very powerful medication, and which demands on the part of the physician the greatest courage, constrained as he is to work against the strongest prejudice and to assume a responsibility so much heavier, as scarlatina with these complications is most often fatal, and as the family would be disposed to charge the fatal issue of the disease to the treatment. The affusions ought to be made at a temperature of 75 or 80 degrees, and last only a minute. The patient is immediately replaced in bed without being wiped, and well covered until reaction is established. Ordinarily under the influence of this treatment, the frequency of the pulse, the dryness and heat of the skin, and the delirium, diminish sensibly. Blood-letting, above all, ought to be avoided in all the complications of scarlatina, and I know of no pyrexia in which in general it is more perilous.

The anginous complications merit also serious attention. While the pharyngeal mucous membrane only participates in the redness of the buccal membrane, and the swelling of the tonsils and the lymphatic glands of the neck is moderate, simple gargles of borax or dilute acids generally suffice; but when the back of the mouth is covered with abundant, fetid, pultaceous concretions, you must not hesitate to resort to cauterization with pure muriatic acid, or with a strong solution of nitrate of silver, and make the patient swallow every hour, in small quantity, a mixture of one part of borax to ten of honey.

It is only in the pultaceous form of the angina that there is danger of its extending to the larynx, as takes place in the diphtheritic angina. Clinical experience has demonstrated that if the diphtheritis propagates itself fatally to the air passages, the angina of scarlatina, on the contrary, is confined to the pharynx, where it sometimes produces gangrene, and favours the development of those frightful scarlatinous buboes which break out in the second stage of the disease. Treating the angina is treating prophylactically the cervical buboes; and this prophylaxis is the more opportune, as, unfortunately, all medication is generally powerless to arrest the suppuration and even the gangrene of the glands when the inflammation has affected them to a certain extent.

Veratrine and quinine are applicable to the treatment of scarlatinous rheumatism. There is no need of saying that everything fails in the suppurative form which I referred to.

It is very evident too that death is inevitable when, in the course of scarlatina, you see ptechæ, and hæmorrhage from the different mucous membranes.

As to the anasarca of scarlatina, even when it is complicated with slight hematuria, it often yields to the expectant treatment and light diet. I have never seen the vapour bath or diuretics do much good. Slight laxatives, and especially calomel, *fracti dosi*, I have seen do great service. If the anasarca and the albuminuria become chronic, then it is what is called *Bright's disease*, and unfortunately medicine is most generally powerless.

Sudden death is very common from scarlatina, but why, we are unprepared to say. But the eclampsia, that is the epileptiform convulsions, often complicate it and fatally too. In such cases, M. Bretonneau advises the head to be elevated, and to practice acupuncture, upon the legs in order to discharge the infiltrated liquid. Compression must be resorted to upon the legs in order to prevent the punctures inflaming.

When the convulsive attacks are almost continuous, alternating compression upon the carotids, made carefully by the physician, sometimes do unhopd for service.

2. *On the Pathology and Treatment of the Diseases of the Scalp, popularly known by the name of Ringworm.* By WILLIAM JENNER.

Of the varieties of the skin diseases those affecting the scalp come, perhaps, the most frequently under our notice. Students, and even practitioners, are often extremely puzzled to diagnose these diseases of

the scalp. This difficulty is partly due to the resemblance of some of them to each other, and partly to the fact that while some writers have given the same name to different things, others have given different names to the same thing.

Several of these scalp affections are popularly called "ringworm," and you must have many times observed the anxiety with which the mother asks whether her child has the ringworm. The cause of her anxiety is, that she understands by the term she employs, a very obstinate and contagious disease.

I propose to consider to-day, certain of these diseases of the scalp which bear a highly important pathological, etiological and therapeutical relation to each other, although they differ very greatly in their readily recognizable physical characters.

You are aware that on the mucous membrane of the mouth, in one form of the disease termed aphthæ, microscopical parasitic plants are developed in enormous quantity; and that, in the stomach, not uncommon vegetable growths are *sarcinæ Goodsirii* and *torulæ cerevisiæ*.

It has been shown, that parasitic plants are also sometimes developed on the skin and its appendages; and in several scalp affections, to which the popular name of ringworm has been especially applied, (because they are obstinate and contagious diseases, having a tendency to spread in circles,) these parasitic vegetables are found in or around the hairs.

What is popularly meant by ringworm, was, by some of the older writers on skin diseases, expressed by the word *tinea*; but the technical name being found, as our knowledge advanced, to have no definite signification, gradually fell into disuse.

It has been recently proposed to employ this word *tinea* again, and to give it a precise signification. Under the generic name *tinea*, it is proposed* to include all diseases of the hairs produced, kept up, or attended by the development of parasitic plants.

In this genus are included the following species:—*Tinea favosa*, *tinea tonsurans*, *tinea decalvans*, *tinea sycosa*.

Tinea favosa most commonly affects the hairy scalp, but now and then it is found on other parts of the surface. It is characterized by thick, dry, yellow crusts, which, if small, are circular in outline, and depressed in the centre, cup-shaped. Passing through the centre of each of these crusts, is a hair. The larger circular crusts have a diameter of $\frac{1}{2}$ inch, and appear as though made up of concentric rings, alternately yellow and brown in colour. If the crusts are very large, they have an irregular shape; but still they indicate their origin from distinct centres by the semi-circular outline of the masses which project from their margin. These large irregular crusts, are pitted on their surface, and from their fancied resemblance to the cut surface of a piece of honeycomb, the disease has received the name of *favus*.

The margins of the large crusts rise considerably above the level of the cuticle; internally, they seem as though half-buried in the substance of the cutis. Carefully detach the crusts from the cutis, and a distinct

* Bazin. *Recherches sur la Nature et le traitement des Teignes.*

layer of epithelium is found below them ; examine the surface of the smaller crusts, and you will find a layer of epithelium covering them.

The hair, at an early period of the disease, can be pulled out from the centre of each little crust with great facility. Subsequently it *falls off*, and permanent baldness ensues.

The crusts, then, of *tinea favosa*, are remarkable for their thickness, dryness, brittleness, and depressed centre. *Tinea favosa* is not a pustular disease, but it is said, by those who have seen much of it, (it is a rare disease in London,) to be often consecutive to eczema, impetigo, chronic lichen, and herpes circinatus ; pustules are sometimes formed subsequently to *tinea favosa*, in consequence of the inflammation excited by the crusts, and the injury inflicted on the scalp by scratching.

That *tinea favosa* was contagious, was placed beyond doubt by Remak. He bound a crust, removed from a patient, suffering from this disease on to his own arm ; after a few days the crust and bandage came off, and there was no appearance of any effect having been produced. But, fourteen days after, he felt the part itch, and, in a short time, a crust of *tinea favosa* formed on the spot.

Tinea favosa is said to occur chiefly in the scrofulous, those mentally weak, and those in bad health.

Tinea tonsurans is often mistaken for herpes circinatus of the scalp, with which it is now and then conjoined. It is characterised by pallor, decolorization, and brittleness of the hairs, and the presence of thin, white, powdery scales around the base of the hairs, and on the skin between them. The diseased hairs have been likened to tow. Their brittleness is sometimes such that every hair on the affected spot is broken off just above the surface of the skin. It is only when inflammation arises, in consequence of neglect, or the application of topical irritants, that crusts are formed on the patches of *tinea tonsurans*.

In *tinea decalvans* the hair falls out rapidly from one or more circular spots, leaving a smooth, bald surface. There is no eruption of any kind—no crusts—no scales.

Tinea sycosa is characterised by inflammation of the hair follicles. Sometimes the inflammation leads only to the effusion of serosity, and the exudation of lymph around and into the capsule of the hair. At other times, and more commonly, pus is formed, and then when the pustule breaks, a brownish scab is formed on the surface. The usual seat of *tinea sycosa* is the chin, upper lip, and cheek. *Tinea sycosa* rarely occurs on the scalp, and does not spread circularly ; so far as I know, the name of ringworm has never been applied to it.

You will have remarked, then, from the characters of the species of *tinea* I have mentioned, that :—

Tinea favosa is especially characterised by its crusts.

Tinea tonsurans is especially characterised by decolorization and brittleness of the hair.

Tinea decalvans is especially characterised by baldness not preceded or accompanied by an eruption.

Tinea sycosa is especially characterised by inflammation, tenderness, hardness, and suppuration of the hair follicles.

I told you that these diseases are arranged together in one genus, because in all a parasitic plant is developed in connexion with the hairs. Now, the plant present is different for each species of tinea; and the situation occupied by the parasite is also different in each species of that genus.

In tinea favosa, the parasite is the *achorion Schönleinii*. This plant has mycelium, sporule-bearing branches, and sporules. The sporules are round or oval, and their diameter varies, according to Gruby, from 0.003 mm. to 0.01 mm.

The vegetable growth is first perceptible between the layers of the epithelium, just at the orifice of the hair follicle; from this point it may spread downwards between the hair and its capsule, and upwards around and in the substance even of the hair.

In tinea tonsurans, the parasite is the *trichophyton tonsurans*. This plant is composed of spores only; the spores, however, are occasionally somewhat elongated, and arranged in a linear series. They are round or oval, and their diameter varies from 0.003 mm. to 0.01 mm.

The primary seat of the trichophyton tonsurans is the root of the hair; subsequently, it extends up into the substance of the hair and even outwards, according to Bazin, on to the skin between the hairs.

In tinea decalvans, the parasitic vegetable is the *microsporon Audouini*. This plant is formed of branched filaments, on which the spores are developed. The spores are very small—from 0.001 mm. to 0.005 mm. The seat of the growth is the outside of the hair; it forms a sort of sheath around the hair, from the surface of the skin upwards, from 1 mm. to 3 mm. Gruby first described this plant, and its relation to tinea decalvans; and Robin says, he can confirm the accuracy of Gruby's description.

In tinea sycosa, the parasite is the *microsporon mentagrophytes*. It is also composed of filaments and spores; but the spores are larger, and the filaments broader, than those of microsporon Audouini.

The seat of the growth is the hair follicle between the hair and the capsule.

I have told you the names I would have you employ to signify the diseases I have described and demonstrated to you; but you ought also to know the names employed by the writers on skin diseases most popular in this country, to signify the same things.

Tinea favosa, then, is called porrigo favosa by Willan and Bateman; favus by Dr. A. T. Thomson, Simon, and many other writers.

Tinea tonsurans is called porrigo scutulata by Willan, Bateman, and Dr. A. T. Thomson; herpes tonsurans by Cazenave; and trichinosis furfuracea by Mr. Wilson.

Tinea decalvans is called porrigo decalvans by Willan and Bateman; vitiligo of the hairy scalp by Cazenave.

Tinea sycosa is called mentagra by Willan and Bateman; sycosis by Mr. Wilson.

As to the etiological relation of the parasite to the disease, it appears, that the spores of the vegetable growth require for their development a

peculiar nidus. I say so, because all persons who mix with children suffering from tinea do not have the disease. But if a soil highly favourable to their growth exists, then a spore having found its way on to that soil develops and forms other spores, and so the parasite spreads over the surface of the individual more or less rapidly, according to the more or less favourable nature of the soil.

You will observe, however, that the abnormality of the secretion necessary for the development of these spores is not appreciable by our senses, nor by the sensations of the patient, for Remak did not know, when he applied the favus crust to his own arm, that his skin was not in all respects healthy; nor was he aware, when he removed the crust, that the secretions of his hair-follicles differed from those of the most healthy individual; and it was not till a fortnight after, that he was conscious that his arm was diseased. This experiment of Remak, then, proves, that a secretion in which these parasites can grow may be formed by the hair-follicles, and the patient believe himself to be in perfect health, not only generally, but even so far as concerns his skin; and that it is only when the parasite has developed in the secretion, that what we call the disease begins; then it is that the growth of the hair is impeded, that it is altered in colour and in intimate structure, that ultimately the hair falls out, and the hair-forming apparatus is so far damaged by the foreign body, that it fails to construct even imperfect hairs, and baldness results.

It would appear, from the fact of a large number of children, whose scalps are supposed to be healthy, suffering from tinea tonsurans, when placed in situations where the spores of microphyton tonsurans are floating in the atmosphere, that many persons, whose scalps are considered healthy, have in their hair-follicles a secretion suited to be the nidus of this plant.

The patient suffering from tinea comes under our care for the perceptible disease, and will be well contented if we can cure him of that; but it would be better if we could also destroy the susceptibility to the disease,—if we could bring the hair-follicles into a state in which they no longer secrete a nidus in which the plant can grow.

Strumous and weakly children, especially if dirty in their persons, are more frequently than others the subjects of tinea; therefore it has been inferred, that struma, debility, and dirt favour the formation of the secretion in question. In the treatment of tinea, then, we strive to enforce personal cleanliness, to strengthen the patient and improve his general health, and to *destroy the parasite*. As to the first and second objects, they are to be effected by attention to hygienic rules, ablu-
tion, air, exercise, and diet; tonic medicine, and cod-liver oil especially, are in some cases useful. But you may kill the parasite in all cases, and in many cases, cure the disease by topical applications alone. Agents, the effect of which is to destroy directly the parasite, are called “parasitocides.” Several agents having such an action have been brought before the profession. Some physicians use a solution of corrosive sublimate. Acetate of copper has been also employed; but these agents are not sufficiently powerful parasitocides for the small

quantity of them that finds its way into the hair-follicles to kill the growths occupying that situation. Therefore, Bazin, who is one of the great advocates of their employment, with the especial object in view of killing the parasites, and not modifying the secretion, says, that it is essential for their efficient action that epilation be performed; that is, that the hairs be forcibly removed from the affected parts. He says, that only two or three hairs should be taken hold of by the pincers at the same moment; and that, if this rule be observed, and diseased hairs alone be operated on, the patient suffers no pain from what seems on paper, a very terrible operation.

It is highly probable that the employment of sulphurous acid as a parasiticide, will altogether do away with the necessity of epilation. This agent was suggested by Professor Graham, as a possible remedy for cholera, at the time that disease was supposed to depend upon the presence of entophytes in the intestinal canal. It was first employed by myself to check fermentation, and to destroy the *sarcinæ Goodsirii* and *torulæ cerevisiæ*. When lecturing on this subject, some time since, I said:—"Considerable benefit may be anticipated from the employment of sulphurous acid, in all diseases attended with the development of parasitic plants. I would especially mention *porrigo*."

In regard to *porrigo*, (*tinea favosa*,) these anticipations have been fully realized, and the results of a single case make it probable that the beneficial effects of this parasiticide will be equally great in *tinea decalvans*.

I may mention, too, that in some forms of thrush, this agent acts most rapidly, one application of a solution of sulphite of soda* (3j. to 3j. of water,) sufficing to remove the disease from the mucous membrane of the mouth in twenty-four hours. The secretions of the mouth being acid, (?) the salt is decomposed and sulphurous acid is set free; in this, as in all other cases, the sulphurous acid is the active agent in the destruction of the parasite.

I cannot conclude without expressing my confident belief, that a great advance was made in pathology when the vegetable nature of the diseases I have referred to, as well as some others, was demonstrated; and my equally confident belief that the foundation for a great advance in therapeutics was laid when Professor Graham called attention to the power of sulphurous acid to destroy vegetable life, and explained how it could be given internally without injury to the patient.†

* Several medical men have lately administered the hypo-sulphite of soda, instead of sulphite, but the latter is the preferable salt, and for the reason that when the hypo-sulphite is decomposed by the hydrochloric acid of the gastric juice, not only is sulphurous acid liberated, but sulphur is precipitated,—a substance that it is often undesirable to have in the stomach.

† The solution of sulphurous acid which I use, is made by passing a stream of the gas through water, until the latter is saturated. Of this saturated solution, two ounces may be added to six ounces of water, to make a lotion.

3. *On the Transformations of Essential Fevers caused by Cow-Pox.*

[Our readers will recollect that, in a former number of the *Journal* (see vol. i. p. 207) we published a paper by M. Bayard on the connection between the prevalence of typhoid fevers and the partial suppression of variola by means of vaccination. Frequent references were made, in that essay, to a memoir addressed by Dr. Ancelon, of Dieuze, to the French Academy of Medicine. On the 12th of September, M. Roche, on behalf of the committee on epidemics, made a report upon this memoir. We present the following abstract of the report and of the discussion upon it, derived from the proceedings of the Academy, as recorded in its *Bulletin*.]

A strange doctrine, said the reporter, one of those doctrines which at first excite astonishment by their boldness and singularity, but against which common sense speedily revolts, one of these doctrines, I say, has been for some time past advocated, and sustained by a false application of statistics. This doctrine affirms, and attempts to prove :

1. That vaccination has transformed small pox into typhoid fever ;
2. That in causing small-pox to disappear, it has given rise to an equally dangerous disease ;
3. That it has simply transferred the mortality of childhood to a later period of life ;
4. That, consequently, humanity has gained nothing, but has rather lost through the practice of vaccination ;
5. That an operation heretofore erroneously regarded as salutary should henceforth be restricted,—they do not yet dare to say, prohibited ;
6. Lastly, that physicians should at once have recourse to inoculation.

These ideas, the offspring of the brain of a mathematician,* have found a partizan in the author of the memoir upon which it is my duty to report. Dr. Ancelon, regarding these propositions as demonstrated truths, has undertaken to apply them to facts and theories in medicine.

The reporter did not think it necessary to discuss singly the arguments of the advocates of this doctrine ; he deemed it sufficient to prove that typhoid fever was as prevalent and as fatal during the reign of small-pox, before the discovery of vaccination, and that it presented the same symptoms and varieties, as at the present day.

“ We group together, he said, under the name of typhoid fever, nearly all of the essential fevers of former writers. The diseases described by our predecessors as malignant fever, putrid fever, synocha, and all the serious mucous fevers, were identical with typhoid fever. The same prodromes, the same symptoms, progress, duration, and fatality, and the same cadaveric lesions. All physicians who have meditated on the records of science agree in recognizing this fact, and declare that it is indeed the same disease under different names.

“ Typhoid fever then is no novelty. It is as old as humanity ; it

* M. Carnot.

existed long before the discovery of Jenner; it is not therefore a product of vaccination. It is no more a result of it than adynamic fever, the entero-mesenteric fever, gastro-enteritis, dothinenteritis, and follicular enteritis are effects of it.

“But if, notwithstanding its impossibility, any one dared to pretend that typhoid fever had supplanted all these fevers, it would still be necessary to enquire whether humanity had lost or gained by this pretended transformation, before launching an anathema at vaccination, the supposed cause of this result. Let us then see if typhoid fever is more common and more fatal than these fevers were. If this was true, those who denounce vaccination would be capable of charging it with being the cause of this unhappy state of things; it is necessary to take from them this last refuge.”

The reporter here quoted the statistics of Stoll, which prove that the number of patients with malignant fever received during fourteen years, at the Hospital of the Sacred Trinity, at Vienna, compared with the number of patients with other internal diseases, was as 1 to 6, that the mortality of malignant fevers was as 1 in 7.6, and that the general mortality was 1 in 14.48; results which agree strikingly with those of our hospitals, and which perfectly represent the proportion of typhoid fevers to other febrile diseases; whence it follows that malignant fever was as frequent and as fatal at the time of Stoll, as typhoid fever is now. Typhoid fever, then, has no more victims under its new name than it had anterior to the discovery of vaccination.

“Before the discovery of vaccination, added the reporter, no one escaped the ravages of small-pox; scarcely one individual in ten thousand was exempt from it. And as it attacked all ages, it could be said with an appearance of reason, that whoever escaped it, died before it developed itself. Therefore, it was considered inevitable, fatal, necessary even, to the elimination of a germ inherent in all men from their birth. It is still the necessity of this imaginary depuration that is invoked by the new adversaries of vaccination, and which they parade before the eyes of society in order to justify their attack on this practice. If typhoid fever has supplanted small-pox, if, as these gentlemen pretend, vaccination has only had the effect, in the first place of retarding the development of the variolous germ, and secondly of transferring the ravages of the skin upon the mucous membrane of the intestines, typhoid fever, we say, ought to attack as many persons as small-pox did, that is to say, it should manifest itself in almost every individual. It does not do so. Scarcely a fifth of the population is attacked by it; even this estimate is exaggerated. Typhoid fever is not, then, the substitute of small-pox, or else the latter has been singularly modified in its transformation. Vaccination in annihilating small-pox, has not given birth to typhoid fever. Between these two diseases there is no correlation or analogy, neither in causes, effects, or frequency.”

The reporter, after remarking how superfluous it was to insist upon truths unanimously recognized by the academy, concluded in the following terms:—

“It is indeed allowable for an officer of artillery to maintain that vaccination is an evil. A physician would be permitted, I suppose, to argue, if the fantasy seized him, that a ball on its exit from a mortar, did not describe a parabola. Every one has the right to choose his subjects of pastime beyond his peculiar studies, and even among questions of which he is ignorant. But that a *physician* should deny the benefits of vaccination, relying on deceptive statistics, which have nothing to do with the matter; that he should make himself the echo, the propagator of such a dangerous error, that he should speciously interpret ancient and modern observation to make a plausible thesis; lastly, that he should support by his talent, his science, and his medical authority, those unhappy prejudices against which governments and enlightened men in every land are struggling, this is totally beyond our comprehension, and afflicts us profoundly!”

The committee proposed, through the reporter:

To write to M. Ancelon that the Academy disapproves and utterly rejects the doctrines in his memoir.

To place his work in the archives without comment. (Good.)

M. Malgaigne demanded the floor. (Murmurs and expressions of astonishment.)

I am very glad, said M. Malgaigne, to have heard this report. There are many points which it perfectly establishes, notably this: that typhoid fever was as common before the introduction of vaccination as afterwards, and I congratulate myself upon it. But there is another point upon which the report does not appear to me to have thrown enough light. There are statistics which the reporter has, I think, disposed of too unceremoniously.

It is said that figures prove nothing, that we must weigh facts. It is necessary to weigh them no doubt, but it does no harm to count them. Is it true that before vaccination the mortality fell most heavily upon childhood? that since it falls most heavily upon adult life? This is a question of figures, but a question of importance. If it is a fact, I should regard it as most unfortunate. If the statistics are false, say so; but, if they are exact, there is no use in asserting that they have nothing to do with the question. The public will not accept a decision in which this important element has been overlooked. I am a partizan of vaccination, I avow it openly, but I admit that my faith has been shaken by these statistics.

I would then request the reporter to have the goodness to give me his opinion in regard to the value of these statistics. This is a question which should be thoroughly discussed.

M. VELPEAU. I am ignorant whether M. Malgaigne is acquainted with an essay which M. Charles Dupin read to the Institute on this subject. If he is acquainted with it, he should know that M. Dupin has explicitly demonstrated that the mean of mortality has diminished since the introduction of vaccination. Undoubtedly this does not completely solve the question in regard to vaccination, for it is necessary to take into account the progress in public hygiene; but the fact is

none the less established, and there results from it at least this much in regard to vaccination, that it does not increase the mortality.

M. ROCHE. M. Velpeau has anticipated the reply I was about to make to M. Malgaigne. The statistics of M. Dupin have completely refuted those of M. Carnot.

M. MALGAIGNE. If you are certain that the statistics of M. Dupin have overthrown those of M. Carnot, why not say so? I should be much better satisfied if a special committee appointed to examine this point would inform me what to think of it. That vaccination has diminished the mortality of infancy, I admit entirely; I even admit as demonstrated that the mean of life is increased. But is it true that the mortality of adult life is increased? That is what I want to know, and what the report does not tell me.

M. REQUIN. I am not as well instructed as M. Malgaigne in regard to the value of statistics in general, and in particular in regard to those of M. Carnot. We must go to the root of the matter. Two or three physicians assert that typhoid fever has replaced small-pox. This is the principal question. The reporter has clearly demonstrated that this is false, completely false. Typhoid fever formerly prevailed at the same time with small-pox, and, under the various names by which it was then designated, it made as many ravages as now. This fact, I may say is maintained by all pathologists. See Sennert, Boerhaave, Stoll, Tissot. I should never end were I to enumerate all the authors who might be invoked in support of this opinion, everywhere you are struck by the perfect identity which exists between the description of the fevers of their time and that of the typhoid fever of our own. It is monstrous to maintain the contrary. I support, then, with all my strength, the conclusions of the report. (Good!)

(The conclusions of the report were put to the vote, and were unanimously adopted.)

4. *Nympho-maniacal Hysteria.*

M. Sandras (*Traité prat. des mal. nerv.* T. i. p. 168) defines hysteria "an habitual nervous condition, in which occur, at a longer or shorter intervals, paroxysms characterised by a peculiar sensation of strangulation, by oppression of the respiration, more or less acute pain in the head, and by clonic convulsions in all or nearly all parts of the body." This rapid description, the only definition possible, omits a double phenomenon, which is very common in hysteria, and of which a patient in M. Grisolle's ward at La Pitié, presents a remarkable example. We refer to anæsthesia (absence of *tactile* sensibility,) and analgesia (absence of sensibility to pain.) However rude the pressure exercised upon different portions of her body, she does not perceive it. A feather may be introduced into the nostrils or pharynx without exciting the slightest sensation. A pin may be passed through a fold of the skin without producing pain. This woman is therefore affected with anæsthesia and analgesia, but not in every point; a very circumscribed portion, the septum of the nasal fossæ is still sensible, and it is

sufficient to pinch this between the fingers to occasion a convulsive paroxysm.

Every sensation may be decomposed into three elements, which are: the impression, the transmission of the impression, and the perception. The impression and its transmission are not indispensable, inconceivable as this appears at first. Do not those who have been subjected to amputations experience sensations referable to the limbs which they have lost? and are not sensations reduced to perceptions in hallucinations? In the particular case of which we are speaking, in hysterical anæsthesia, and analgesia, which of the three elements of sensation are wanting, or are they all absent?

The patient of M. Grisolle is interesting in another point of view; and here again we have to signalize an omission in M. Sandras' article on hysteria. It does not mention the libidinous, erotic, or nymphomaniacal form of hysteria; a form which is nevertheless common. Not only is M. Sandras silent in regard to the erotic form of hysteria, but he denies that hysterical women "are more disposed than others to take an active part in sexual intercourse;" and he adds, that the contrary rather is true. T. i., p. 193.

In M. Grisolle's patient the erotic form is very marked. This woman's first action, when her paroxysms come on, is to seize upon the nearest man, and she moves the pelvis in a voluptuous manner throughout the whole duration of the attack. At the visit, when she is surrounded by the medical staff, her desires are seen to become excited whenever she is spoken to. This is not nymphomania, for the hysterical paroxysms are perfectly characteristic. On that score, it is sufficient to say that she is considered hysterical by such an observer as M. Grisolle. It will be easily understood that, under such circumstances, no attempt has been made to ascertain the condition of the sensibility of the genital organs.

M. Grisolle saw, some years ago, a case of hysteria in a very distinguished woman of fashion, thirty-five years of age, the widow of a man who, having become the victim of satyriasis, subjected her to the rudest assaults. It cannot be doubted that the privation of sexual intercourse, succeeding such great abuse, was the cause of the hysteria in this case, and for this reason. This lady soon married a robust man, and under the influence of marriage the hysteria was dissipated.

Relatively to the treatment of this strange neurosis, the case we present is likely to modify the opinion of M. Sandras, who expresses himself in these terms:—"I have never witnessed a case in which the enjoyment, or even the abuse, of venereal pleasures, have produced a diminution or cure of hysteria." (T. i. p. 193.)

The seat, or rather the starting point of hysteria, is very obscure, and is the subject of much dispute; the majority of physicians and philosophers have placed it in the womb. Vain attempt at localization! Is it not true that hysteria has occurred in a woman without a womb, and also in men.

M. Grisolle has seen one example of hysteria in a woman in whom the uterus was absent. The anatomical fact was established by M.

Chassaignac and himself. It was easy to be satisfied in regard to it by introducing a sound into the bladder and a finger into the rectum. On either side, could be felt two small bodies supposed to be ovaries. The hymen was intact, and behind it, instead of a vagina, there existed an opening of scarcely more than a line in depth. The external genital organs were normal. The mammæ very large. Strangely enough, hysteria assumed the strongly characterized erotic form in this unfortunate, who (*à cause de son extrême lubricité*), was greatly sought after by the nurses of the hospital. Is it not clear, after this case alone, that the cause of hysteria is not in the uterus, neither in venereal appetite?

Where then does it reside? We say simply, without entering into considerations which would carry us too far, that it varies, probably, in different cases; but, that wherever it may be, the morbid action, even if eccentric, inevitably rebounds upon the nervous centres, and from these irradiate the influences which produce the multiplied neuro-pathic phenomena which constitute the fantastic symptomatology of hysteria.

As to venereal desire, it arises in the central nervous system, in a point which we do not now seek to determine (apparently in the cerebellum), but which is affected, on the one hand, by the excitement of the imagination, and, on the other, by physiological or morbid excitement of the external organs of generation.

Is hysteria diathetic, that is to say, connected with a general condition of the economy, or does it consist in an organopathy limited to the nervous system? This is still a problem unsolved by the sagacity of pathologists.—*Gazette des Hôpitaux*. No. 18.

SURGICAL PATHOLOGY AND OPERATIONS.

5. *A Case in which the Abdominal Aorta was Tied.* By Professor MONTEIRO, of Rio Janeiro.

This case, which is the fourth of the kind on record, occurred so long ago as November 5th, 1842.

The patient was a man, aged 31, and suffering from what appeared to be aneurism of the right common iliac artery. The symptoms had first declared themselves after a long ride on horseback.

The operation having been agreed to by his colleagues, M. Monteiro made an incision from the left antero-superior spine of the ilium to the tip of the last free rib, in which the superficial fascia, the oblique and the transverse muscles, and the fascia, were successively divided. He then exposed the aorta behind the peritoneum by breaking down the

intervening cellular tissue; and the peritoneum and its contents having been raised by the hand of an assistant, he passed the ligature by means of a long needle and tied it in a double knot. After this he closed the wound in the parietes by three twisted sutures.

Immediately upon the tying of the ligature the pulsation ceased in the tumor and the inferior extremities became cold, but four hours afterwards the coldness had passed off and the temperature had risen a little beyond the natural point. During the two following days nothing remarkable occurred, and the only point of interest in the report is that the lower limbs were not paralyzed. On the 8th there were slight pulsations in the lower part of the tumour and in the femoral ring. On the 9th these pulsations were more marked. On the 12th the wound in the parietes had healed, except at the point occupied by the ligature connected with the aorta. On the 14th about two ounces of red blood escaped by the side of the ligature, the pulse was small and frequent, the skin clammy, and the lower extremities cold. On the 15th there was fresh hæmorrhage by the same channel, together with extreme feebleness, and great pain in the right iliac region. On the 16th the hæmorrhage recurred, with vomiting and hiccough, and the patient died.

The *post-mortem* examination revealed no sign of inflammation in the peritoneum. The aorta had been tied about four lines above its bifurcation, and an inch below the inferior mesenteric branch. Above the ligature the vessel was empty, and the fatal hæmorrhage was found to have issued from an opening in its coats corresponding to the knot of the ligature. The tumor, which was found to be false aneurism, appeared to have originated in a small rupture of the femoral artery about an inch below Poupart's ligament, and from this point the blood had wormed its way into the neighboring intermuscular cellular tissue of the thigh and upwards, under Poupart's ligament into the iliac fossa, and thence behind the peritoneum to the back of the liver and the under surface of the diaphragm. The right common and external iliacs were red, friable, and seated in the upper and inner side of the tumor.

Ranking's Half-yearly Abstract.

6. *Ligature of the Femoral Vein.* By M. ROUX.

At the meeting of the Surgical Society of Paris, of July 27th, M. Roux asked leave to communicate an observation which had recently occurred in his practice.

A patient had been operated on twenty-eight days previously for a voluminous tumour, occupying the whole of the inguinal region, and descending into the scrotum.

The tumour was composed of various elements, but contained no cancer cells; it had relapsed five times.

It had been removed four times by Chelius; it first appeared eight years ago; the last operation was done ten months since. The constitution was not impaired.

After having dissected the tumour superficially, when it became ne-

cessary to separate the deep-seated portions, the surgeon avoided the artery, which it was necessary to dissect for a considerable extent, but it was not possible to avoid the crural vein, and this was opened.

I thought it best, said M. Roux, to place a ligature above and below the wound. The wound was above the junction of the saphena.

At the moment I applied the ligature the limb became livid and cold; but on the following day the colouration was less, and the temperature was normal.

On the third and fourth days a considerable œdema supervened, invading the whole of the limb, quite up to the hip. A few days afterward erysipelas came on, and passed through its regular stages; and then an abscess formed on the side of the foot. This was opened and readily healed up. At present the patient is in a very satisfactory condition.

The operation lasted two hours; the patient was under the influence of ether the whole of this period.

The wound has nearly cicatrized.

This fact, said M. Roux in conclusion, appears to me most important. Perhaps I was the first who called the attention of surgeons to the danger of wounding the femoral vein above the saphena. *A priori* this should be considered a most serious lesion; nevertheless, in this case, perhaps unique, we see that the accidents were altogether insignificant. *Gazette des Hopitaux.* August 6th.

7. *Fistula in Ano, treated by Iodine Injections.* By M. BOINET.

At the meeting of the Institute, of August 1st, M. Boinet read a memoir designed to demonstrate the efficacy of injections of iodine in the radical cure of fistulæ in ano, whatever their form, extent, or complications. Seven cases are detailed, which offer examples of almost every variety of fistulæ: complete, blind or incomplete fistulæ, deep fistulæ with loss of substance of the intestine, and fistulæ, in tuberculous subjects. These observations tend to prove that iodine injections may be advantageously employed in all cases of fistula, but especially in those in which the method by incision is dangerous or ineffectual; such, for example, as extend deeply, or occur in phthisical patients, or depend upon some alteration of the ischium, the coccyx, or the sacrum.

The advantages of iodine injections over the ordinary method, consist in obtaining a cure more easily and in a shorter time, in avoiding pain and the danger of hæmorrhage, and in permitting the patients to continue at their usual avocations.

The following are the conclusions of the memoir:

1. Iodine injections properly administered, can cure radically all cases of fistula, whether complete or incomplete, simple or complicated.

2. They cure them more promptly than the method by incision commonly employed, and with less danger.

3. They produce no pain, and are easily practiced.

4. They permit patients to follow their occupations, and relieve them from daily painful dressings.

5. They are applicable to all cases, and especially to those in which incision or excision are dangerous or impossible.

6. They do no harm even if they are ineffectual, and do not prevent the subsequent use of the knife. It is therefore rational to employ them before having recourse to a cutting instrument.—*Gazette des Hôpitaux*, No. 92.

8. *Impalement upon a Pitchfork-handle, entering per Vaginam. Recovery.*

[At the meeting of June 13th of the Boston Society for Medical Improvement, Dr. Sargent, of Worcester, related the following extraordinary case, which occurred in his practice, nearly two years ago.]

A lady, of about 37 years of age, who had borne several children, the last about three years previous to the injury about to be mentioned, and whose last menstrual period had been about a week before, her bowels also being in good lax condition, in sliding down from a hayloft, impaled herself upon the handle of a pitchfork, which passed in at her vagina to the length of twenty-two inches, when her feet struck the ground. The handle was immediately withdrawn, the patient carried into the house, and Dr. S. sent for. He found the patient, half an hour after the injury, lying on her back, with the thighs flexed, and the skin cool, pale, and moist (as if from fright), and the pulse not much accelerated. There was no external injury, and no physical evidence of effusion into abdomen or thorax, and no urine nor fæces on the garments, nor about the person, nor on the field of the accident, nor on the handle of the fork. There was some blood flowing from vagina. Patient passed water during the visit, and it was not stained with blood. She complained most of pain in the left thorax, on a line with the scapula. Dr. S. saw the handle of the fork, which was rounded, a little larger at the end than elsewhere, perfectly smooth, two inches in diameter, and showed distinctly the stain of blood up to an abrupt line, twenty-two inches from the end.

Dr. S. theorized, in this case, that the instrument must have perforated the vagina at its upper part to the left, and gone between the uterus and rectum. [If it had gone to the right it would have perforated the cæcum.] The form of the instrument would make it much easier for it to pass between than to perforate organs, and Dr. S. supposed that it passed in front of the kidney, behind the spleen and between the diaphragm and false ribs, peeling up the costal pleura till it reached the *scaleni muscles*. The subsequent history of the case, which showed a fracture of the first rib, while, also, there was at no time any effusion into the chest, proved this diagnosis correct. Supposing that the greatest safety of the patient was in what might be called *forced rest*, Dr. S. gave her one grain of morphia (by estimate), and bound her chest firmly with a broad bandage of new flannel, placing a towel, wet in cold water, between this and the skin. The morphia was repeated

in an hour, and one-third of a grain three hours after. Patient passed water repeatedly in first twenty-four hours, without trouble and without blood, and passed coagula from the vagina. The day following, there was emphysema above left clavicle; and, the day following, crepitus in left axilla high up, as if from fracture of bone. There was at no time any evidence of pneumonia or pleurisy, though there was deficiency of respiratory murmur in left chest from the pain in its expansion, the percussion remaining good.

The pulse stood at 120 for several days, and the opiates were continued about as long.

The injury was inflicted the 7th of August, 1851, and Dr. S. was in daily attendance for nine days; and, occasionally, afterwards, for three weeks. The recovery was entirely favourable, the patient being left only with an ill-united fracture of the first rib, over which there was some painful swelling for several weeks, which ultimately subsided, leaving an osseous prominence in the supra clavicular region, in intimate relations with the *scaleni* muscles.—*Am. Journ. of Med. Sciences*. October.

[In another part of the same Journal, we find the following somewhat similar case, communicated by Prof. Meigs, and reported by Dr. G. S. Bryant, formerly of Virginia.]

“During my residence in Amherst county, Va., in 1850, I was called, on the 25th of April, at about 3 P. M., to see Phœbe, a slave, æt. 25, black, smooth skin, small stature, and the mother of three healthy children.

“On arrival, learned that, at about 2 P. M., patient had leaped from the height of ten feet, and alighted upon a tobacco stick, which had been driven firmly in the ground and was concealed by some loose fodder. The stick was four and a half feet long, and one inch square. The vagina was entered without doing much injury to the vulva; the stick passed up the canal, and perforated its walls on the right side of the *os uteri*, entered the cavity of the abdomen, and passed in an oblique direction upwards, and finally lodged against the twelfth and eleventh ribs of the right side.

“4 P. M. Hæmorrhage quite subsided, but at the time of accident it was very profuse from vagina; pulse 120, and very small; extremities cold; countenance anxious; pain in abdomen distressing; nausea and frequent vomiting; mind clear.

“*Treatment*.—R. Tinct. opii ʒj; brandy ʒij. To be given at once, and repeated every hour or two until reaction, or relief was obtained; warm applications to the extremities, and a poultice to the entire abdomen, constituted the principal treatment.

“26th, 4 P. M. Slept during the latter part of last night, and has been sleeping occasionally during the morning, but is not altogether free from pain. Reaction took place about 12 o'clock last night; pulse now 110, quick and hard; abdomen much swollen, hard, and tender to

the touch; complains a good deal of the side, about the point where the stick lodged, and the lower region of the liver. The swelling and contusion externally are considerable, and she cannot bear the part to be handled; vulva very much inflamed; passes water with much pain and difficulty.

"Dover's powders, grs. x, at bedtime, to be repeated during the night if necessary; effervescing draught every two hours; continue poultices.

"27th, 10 A. M. Rested pretty well last night; pulse 112, hard; skin dry; abdomen very much distended and painful to touch; eyes very red; has vomited some bilious matter; passes her water still with difficulty; bowels have not been moved since accident. R. Hyd. chlo. mit. grs. vj; rhei, grs. x. Make iv pills; to be given at once, and followed by an enema of soap and water in six or eight hours, if no action is had by this time; anodynes and poultices continued; vulva to be frequently cleansed with Castile soap and warm water.

"28th, 11 A. M. Pulse 100 and softer; has had several bilious discharges; some discharge of pus from vagina; no other material change. R. Blue mass, grs. xvj; Dover's powder, grs. xi. Make into viij pills. One to be given every six hours. Continue effervescing draught, poultices, &c.

"29th, 10 A. M. Abdomen enormously distended, dull on percussion and painful on pressure; bowels have been moved twice, discharges of bilious character; pulse 118, small and quick; rested badly last night; skin dry, tongue coated over with a brown fur. Continue treatment.

"30th, 10 A. M. Had, about 2 o'clock last night, a copious discharge of grumous blood from the bowels, which discharge continued to occur every hour or two until 9 A. M. this morning; could not ascertain the exact quantity, nurse supposed it to be from seven to eight quarts; *this is no doubt a too liberal estimate*. Abdomen has gone down very much; pulse 130, small and feeble; skin dry and cool; she seems quite exhausted; vaginal discharge continues. Ordered half a grain of sulph. morphia at once; infusion of serpentaria ʒj, to be given at intervals of two hours. Continue pills and poultices, but discontinue draught.

"May 2, 9 A. M. Abdomen much flattened; had two bilious discharges yesterday, free of blood; pulse 112, small and soft; vaginal discharge more profuse; passes her water freely; skin dry; has some appetite. Continue treatment.

"4th, 10 A. M. Has done well since last visit, until last night. Nurse thinks she was alarmed by a conversation which took place in the room upon the subject of death and her probable recovery. After an hour or two she was better, and again expressed her belief that she would get well, never before having any doubt about her recovery. Bowels have been moved once this morning; biliary secretions improving; skin continues dry; pulse 108; appetite better. Continue treatment; is allowed a more nutritious diet.

"6th, 10 A. M. Pulse 108, soft; skin moist; bowels in good con-

dition; appetite good; vaginal discharge diminishing; complains of little else than soreness in the right side.

"Ordered tonics and better diet; mercury discontinued; no appearance whatever of its constitutional effects.

"8th, 12 M. Convalescing. Continue tonics.

"11th, 11 A. M. Convalescing rapidly.

"Recovered fully by the middle of June following."

MATERIA MEDICA AND PHARMACY.

10. *Resolvent Action of Alcohol.*

According to Professor Nèlaton, pure alcohol is the best of resolvents; the only agent, in fact, which deserves the name. The experiments which he has made, leave not the slightest doubt upon his mind on this score. Observation has taught him that lead-water and solutions of muriate of ammonia have no greater resolvent power than pure water. As much may be said of spirits of camphor, which is rendered useless by the water with which it is diluted. Pure alcohol alone exercises a real influence upon the absorption of effused liquids. —*L'Union Médicale*, August 13th.

11. *Hæmostatics.*

Surgeons who manage the knife skilfully, and who take up arteries and use caustic freely, usually care little for other hæmostatic means. Patients however, and a large number of physicians have not an equal repugnance for these remedies. There are cases in which they are very necessary, in consequence of the friability of arterial tunics, or the difficulty in arriving at bleeding orifices, or the venous or capillary nature of the hæmorrhage. These preparations are also of utility in internal hæmorrhages.

Besides the absorbents, refrigerants, and astringent compositions, in general use, several balsamic preparations, have lately come into vogue.

M. Sédillot recommends the *Eau de Pagliari*, which consists of: Gum Benzoin (not the tincture, as some journals have it) ℥viiij; Alum, ℥bj; Water ℔x. Boil for six hours, replacing the water that evaporates by boiling water. Filter. This preparation, of a transparent straw-colour, is said to possess remarkable coagulating power.

Eau de Hepp is a modification of *Eau Pagliari*.

Eau de Lechelle is employed by French and Italian practitioners both externally and internally. It is chiefly remarkable for its complexity of its ingredients, some twenty-three vegetable astringents, balsamics, etc., entering into its composition.

We may briefly notice some other styptic liquids which have acquir-

ed reputation. The *Eau de Brocchieri* may be made, according to Martin, by macerating pine chips in double their weight of water for twelve hours, and then distilling this liquid until the product equals in weight the amount of wood employed. The volatile oil must then be separated, and the liquid must be shaken before being used. Recamier was a great advocate of this preparation. *Eau de Rabel* consists of sulphuric acid 100 parts; alcohol, 300 parts, the acid must be poured upon the alcohol slowly.

Eau de Tisserand was recommended by Fremy in epistaxis, hæmoptysis, and intestinal hæmorrhage. It is composed of: Dragon's Blood and Turpentine, each, ℥iij, ʒiij; Water ℔bj. Digest twelve hours and filter.

11. Balms.

Baume Chiron ou de Lausanne.—Take of olive oil, ten ounces; Venice turpentine, two ounces; yellow wax, one ounce; alkanet root, half an ounce; boil together, strain and add of balsam of Peru, two and a half drachms; camphor, nine and a quarter grains; stir constantly until cold. Employed to promote the cicatrization of chapped nipples and broken chilblains.

Balm for Chilblains.—Take of rectified spirit of turpentine, one drachm; sulphuric acid, fifteen grains; olive oil, two and a half drachms: mix. To be rubbed night and morning on unbroken chilblains.

Goulard's Balm (Oil of Saturn).—Take of essential oil of turpentine, any quantity; heat it *secundem artem*; decant, &c. Used for dressing phagedenic ulcers, ecthyma, some chronic eczemas, and rupia.

Plenck's Mercurial Balm.—Take of mercury, one ounce; Venice turpentine, half an ounce; lard, three ounces; calomel, seventeen grains and three quarters; elemi ointment, three ounces: mix. Used for dressing venereal ulcers.—*Dublin Quarterly Journal*.

OBSTETRICS, &c.

12. Puerperal Convulsions. By M. CHAILLY-HONORE.

In a letter addressed to *l'Union Médicale*, M. Chailly says that out of nineteen cases of eclampsia which he has encountered he has lost only a single patient, and that in her case the intervention of art was differed by circumstances beyond the control of the accoucheur. He attributes these fortunate results to the observance of the following precepts. He advises, if the convulsions occur before labour, the induction of premature delivery, an operation which he considers altogether safe. During labour the ovum should be gotten rid of, by means of artificial dilatations of the os, incisions being employed, in-

asmuch as they are much less dangerous than the convulsions. Lastly, version or delivery by the forceps must be effected; operations which are inoffensive as far as the mother is concerned, and which cannot be compared to the dangers attendant upon eclampsia.

It may be objected, it is true, that the expulsion or extraction of the ovum does not necessarily put a stop to the convulsions. This is true, and the author cites three instances of it from his own practice; but these three women recovered notwithstanding, and their children lived. Moreover, as gestation and the puerperal state are the primary cause of eclampsia, it is rational to admit that by removing these conditions, the eclampsia will be checked, if not immediately, at least in a much shorter time than if no interference was exercised.

There is one point in prophylaxis upon which M. Chailly claims to have first called attention.

Whatever, he says, may be the predisposing causes of puerperal convulsions, albuminuria, anasarca, etc., etc., it often fortunately happens that convulsions do not occur when the labour is rapid, easy, and painless; whereas, if the labour is tedious and prolonged, especially if the womb has serious obstacles to surmount, the attack of convulsions will frequently supervene, as soon as the pains become violent.

Lessen the pain, render it supportable, and you will very probably avoid the convulsions.

It is in such cases that anæsthetic agents, which M. Chailly never employs in natural labour, may be of signal service. This practice, which he considers perfectly rational in cases in which a predisposition to eclampsia exists, should be the rule of conduct of the accoucheur in all cases in which the contractile pains become insupportable, even where no apparent predisposition is present; for M. Chailly has witnessed cases of puerperal convulsions in which albuminuria could not be suspected, and in which it was only discovered after the unfortunate event.

THERAPEUTICAL RECORD.

Ascites.—M. Guitard, chief interne at the hospital Hôtel-Dieu of Toulouse, reports (*P Abeille Médicale*, Sept. 15,) a case of ascites, dependent upon a tumour of the pylorus, which was cured by the infusion of *spiræa ulmaria*, after many powerful remedies had been employed without effect. M. Guitard takes occasion, in his report, to speak in warm praise of this medicine, which has been lately revived, after remaining forgotten for a long period.

Cardialgia.—Dr. Linoli relates (*Annali univ. di med. di Milan*) a case of obstinate cardialgia, accompanied by so much pain, vomiting, and emaciation that a cancer of the pylorus was suspected. Upon

examination, Dr. Linoli discovered that the ensiform appendage was inclined backwards, towards the stomach, thus forming an obtuse angle with the rest of the sternum; and that by pressing upon this cartilage, the pain was aggravated and nausea was induced. Dr. Linoli determined to resect the xiphoid cartilage. He made an incision upon it, divided the peritoneum, and then, by means of a probe-pointed bistoury, he separated the cartilage from its attachments. Two small arteries were tied, and two points of suture were made. The wound healed in eighteen days, and the cardialgia disappeared. Eight months afterwards it had not recurred. It is to be hoped that such heroic therapeutics will find few imitators.—(*Archives générales.*)

Chloro-anæmia.—M. Pétrequin strongly recommends the various ferro-manganic preparations in this disease. The following formulæ are selected from a number employed by him: Bicarbonate of soda, 20 parts; tartaric acid, 25 parts; powdered sugar, 53 parts; powdered sulphate of iron, $1\frac{1}{2}$ part; finely powdered sulphate of manganese $\frac{1}{4}$ part; mix carefully, and keep in a well-stopped bottle. A teaspoonful of this powder is mixed with a glass of wine and water, for an effervescing draught. It is taken at meal time; or pills may be given, composed of sulphate of iron, 75 parts; sulphate of manganese, 25 parts; carbonate of soda, 120 parts; honey, 60 parts; and a sufficient quantity of water.

Creosote.—M. Arendt (*Frorieps's Tagesberichte*) states, that the great advantage he had derived from the use of creosote in asthma and bronchitis, had induced him to try it in other affections, especially those of the mucous membranes. In *chronic varicose ophthalmia* he had found from 1 to 3 drops of creosote to an ounce of water a valuable collyrium. *Cardialgia*, especially the idiopathic form in women, was speedily amenable to creosote, 3 drops in sugared water relieving the severest pain, a repetition in two or three hours being rarely required. Leucorrhœa often yielded to a lotion of 2 drops to an ounce, thrown in two or three times a day. So also three or four injections usually sufficed for the cure of *gleet*. In *menorrhagia* in non-pregnant women, and in some cases of hæmorrhage before delivery, depending on *placenta prævia*, it has been found very useful. Indeed, it is a valuable hæmostatic agent, whenever the bleeding proceeds from small vessels, and especially those of the mucous membranes. In some of these cases a more concentrated mixture is required, as 10 to 20 drops to the ounce.—*Med. Chir. Rev.*

Fever—Continued.—Dr. Todd, (*Med. Times and Gaz.* Aug. 27th) has treated a series of seventeen maculated typhus, by the free exhibition of brandy, ($\frac{1}{2}$ to 1 oz. every hour or half-hour, day and night.) In addition ammonia, chloric ether, and strong beef-tea, were administered. One case died; in the other cases, the benefit from the treatment was very marked. The pulse was uniformly reduced in frequency, and the skin became moist, and perspirable.

Fever—Intermittent.—A limpid fluid, of peculiar and not unpleasant

odour, is obtained by the distillation of the quinate of lime, alcohol, and sulphuric acid; its exact chemical nature has not been yet ascertained. M. Manetti, a young medical student, suggested the inhalation of quinia in this form. Signor Pignacco, professor of clinical medicine at Pavia, has succeeded in six cases, in arresting intermittent fever by four inhalations during the interval.—*Med. Times*, from *Gaz. Med. Lomb.*

Neuralgia—Facial.—Dr. Fall, of Stockbridge, Georgia, announces (*Southern Med. and Surg. Journ.* October) that intermittent neuralgic pains of the face and head are promptly and certainly relieved by the application of common salt mixed with white of egg, applied to the seat of pain after being spread upon a folded cloth. In the cases adduced in support of this opinion, we observe that quinia was associated with the local remedy, and are therefore inclined to doubt the efficacy of the latter.

Phthisis.—Dr. Weber of Ilten has reported in a Dutch journal, the *Tydschrift*, a preparation long used in Germany under the name of *liquor coriario-quercinus inspissatus*. This is an extractive matter of brown colour and astringent taste, which is obtained from the clear yellow liquid produced in tanning hides with oak-bark, by filtering it and evaporating it to a proper consistence on a water-bath. It is advised in chronic pulmonary affections, especially in phthisis, and is said to diminish the expectoration, sweat, etc. The following formula is recommended. R. *Antiphthisic* extract, ℥ij; Decoction of Iceland or carraghaen moss, Oj; White sugar, ℥ij.—*Revue de Therapeutique*.

Pertussis.—Dr. Watson (*Assoc. Med. Jour.*) confirms the statements recently made in regard to the efficacy of topical applications to the larynx. Dr. Watson has also used the hypo-sulphite of soda and silver with good effect.—*Med. Chir. Rev.*

Pneumonia.—M. Aran reports (*Bull. de Therap. du 10 juillet*) six cases of pneumonia treated by veratrine, in which the beneficial effects of this agent were so striking that it was impossible to doubt them. M. Aran administers the veratrine in doses of one-tenth of a grain every two, four, or six hours, according to individual conditions.

Strabismus.—Mr. Wells (*Med. Times and Gaz.* August 27th,) speaks highly of the effects of the prismatic spectacles, first recommended by Dr. Kurke, a Dutch physician, for the cure of squinting. On the sound eye the use of the prism produces an image on a point which does not correspond with that of the other eye; double vision is thus produced, which, if the prism is not too strong, is corrected by increased muscular action. In some cases the prismatic glasses have been found useful after an operation, where by themselves they had been inefficient. Dr. Von Gräfe, of Berlin, has employed them extensively, with satisfactory results.

Tænia.—Prof. H. S. Patterson, of Philadelphia speaks in high terms (*Phila. Med. Examiner*) of the efficacy of the oil of the seeds of the

common pumpkin (*cucurbita pepo*) in procuring the expulsion of the tape-worm. It succeeded in one case in which turpentine and kousso had failed. These seeds abound in a fixed oil, which is readily procured by cold expression. Dose— ʒss , which may be repeated.

Tænia.—Dr. Christison (*Monthly Journal*, July) employs with great success in tape-worm, the ethereal oleo-resinous extract of male-shield fern (*Aspidium Filix Mas*), in doses of 20 to 24 grains.—*Med. Chir. Rev.* October.

STATISTICS.

The Weather in Richmond during the month of September. By
D. TURNER, Esq., A. M.

Hours of Observations, 6 A. M., 2 P. M., 10 P. M.

[Being an extract from a meteorological journal kept by Mr. Turner, at his school rooms.]

Year.	BAROMETER.				THERMOMETER.				Inches of Rain.	Rainy Days.	Cloudiness.	Fogs.	Thunder Showers.	Force of Vapour.	Relative Humidity.	Prevailing Winds.
	Mean.	Maximum.	Minimum.	Range.	Mean.	Maximum.	Minimum.	Range.								
1851,	29.988	30.390	29.646	.744	70.6	93.0	49.0	44.0	0.76	6	3.3	2	0	-	-	sw.
1852,	29.952	30.197	29.376	.821	66.6	88.0	49.0	39.0	2.11	6	3.9	7	0	12.8	79	sw.
1853,	29.909	30.152	29.609	.553	68.9	88.0	43.0	45.0	3.38	8	4.0	8	2	14.3	78	sw.

WINDS—OBSERVATIONS.

	N.	NE.	E.	SE.	S.	SW.	W.	NW.	No Winds.	
1851,	14	14	9	8	16	19	7	8	1	
1852,	6	8	2	4	9	19	5	28	9	
1853,	5	8	2	8	7	26	11	17	11	

Rains.—On the 1st, .25 inches; on the 3d and 4th, .47; on the 7th, .02; on the 9th and 10th, 1.59; on the 14th, .10; on the 20th, .94. Two thunder showers.

There was a high wind on the evening of the 29th, at which time several vessels were wrecked on Lake Erie and in the Gulf of St. Lawrence.

There was a slight Aurora Borealis on the evening of the 27th.

The Comet which was so distinctly visible during the latter part of August, disappeared the first of the month.

Reports of Interments in Richmond. By A. MICHAELS, Esq.,
Superintendent.

1. *August 15th to September 15th.*

Ages.	Whites.	Colored.	Causes of Death.	Whites.	Colored.
Adults,	15	18	Pneumonia,	4	
10 to 20 years,	1	2	Consumption,	3	3
Under 10 years,	28	17	Paralysis,		3
Stillborn,		2	Dentition,	3	3
	—	—	Cholera Infantum,	14	7
	44	39	Old Age,		3
	=	=	Intemperance,	4	
Unknown cause of death,		34		—	—
Various causes mentioned,		49	Total,	28	19
		—		=	=
Total,		83			
		=			

2. *September 15th to October 15th.*

Ages.	Whites.	Colored.	Causes of Death.	Whites.	Colored.
Adults,	23	18	Pneumonia,	2	
10 to 20 years,	4	3	Consumption,	7	4
Under 10 years,	16	11	Affection of Brain,	2	2
Stillborn,		3	Typhoid Fever,	3	
	—	—	Bilious Fever,	2	
	43	35	Cholera Infantum,	3	4
	=	=	Dysentery,	3	
Unknown cause of death,		34	Accidents,	3	
Various causes mentioned,		44	Suicide,	1	
		—	Old Age,		3
Total,		78	Intemperance,		2
		=		—	—
			Total,	26	15
				=	=

EDITORIAL AND MISCELLANEOUS.

We regret to announce that Dr. THOMAS has been compelled, by the pressure of other duties, to withdraw from the editorial charge of this Journal. Our readers will be glad to learn, however, that the work will continue to receive contributions from the able pen of our late coadjutor.

We are happy to announce that, at its late meeting in Charlottesville, the State Medical Society sanctioned with remarkable unanimity, the proposition which was first advocated in the August number of this Journal, in regard to a "State Medical College."

Our readers will recollect that, in the article referred to, we alluded to those objectionable characteristics which would prevent a merely private corporation from attaining any large measure of success, and that we urged the faculty of the medical school in this city, to unite with the profession at large, in an attempt to induce the legislature to establish a college of medicine upon a broad and liberal basis. We also expressed our conviction that the trustees of Hampden Sidney College were not suitable regents for such an institution, being self-constituted, and generally regarded as a sectarian body.

Various communications from different portions of the State, have led us to believe that physicians generally coincided in these views; the recent action of the association at Charlottesville, is another proof of the correctness of this supposition.

We must express our regret, however, that while such unanimity is exhibited by the mass of the profession, an utter want of harmony exists among a number of its most influential members; we apprehend that, unless these dissensions are healed, the legislature, perplexed by the conflicting arguments and jarring interests of the different parties which are supposed to represent the Medical Profession, will throw up in despair the task of legislating for such a discordant multitude.

Yet, after all, the question is simple enough. It is the universal wish of the disinterested physicians of the State, that a complete medical school should be established in Richmond, and governed by an enlightened and impartial board. It is only necessary to constitute a governing power which shall command the confidence of the medical community—a board of regents free from political, sectarian, and personal bias, and success is certain.

The plan proposed by the State Medical Society perfectly fulfils these conditions, and, unless the constitutional provision, forbidding judges of the Court of Appeals to hold offices of public trust, should prove an impediment, it will deserve the active and cordial support of the whole Profession. For this plan, originating, we believe, with Dr. Stribling, of Staunton, is a liberal and practicable one, in which all parties may unite; it is totally unconnected with the local quarrels and minor questions which have obscured the great point at issue.

When we have procured from the legislature a proper organization for a State Medical School, parties may wrangle at their leisure over the professorial appointments in it—the Profession will have achieved its task.

DEATH OF DR. WATSON.

Metam properamus ad unam.

This distinguished physician died on Wednesday, the 12th ultimo, at his country residence in Louisa, his native county.

Dr. Watson was nearly seventy years old; for forty years he was a practitioner of medicine and surgery in Richmond, where he enjoyed the entire respect and confidence of the community.

Dr. Watson has published no contributions to medical science, that we know of, by which his attainments may be estimated, but it is the opinion of those of his professional brethren who knew him best, that he possessed a profound and discriminating judgment, extensive and accurate knowledge, skill as an operative surgeon, and, above all, a most elevated and benevolent character.

We present the following extract from one of the many eulogies which have been elicited by his death:—

“ And now that Death has put his seal upon a well-spent life, we would lift up for imitation this completed character as it stands before us in all its beautiful proportions.—In these plastic times it were well to study such a character, exhibiting as it did a spotless integrity and Roman firmness—a high-toned honour that refused to sacrifice the dignity and elevation of his profession for its mere emoluments—an unutterable scorn of deception and empiricism in all its protean forms. But over these sterner qualities there shone a kindness of heart and “ a daily beauty of life ” that threw a sunshine over all his deeds—forming a happy union of public and private virtues, which well entitled Dr. Watson to be ranked and remembered as a noble example to his profession, and as an ornament to his kind.”

Prize Essays.—The following prizes are offered for medical dissertations :

Two prizes of \$ 100 each, for the two best essays on any medical subject ; offered by the American Medical Association. Communications must be addressed to Dr. Charles A. Pope, St. Louis, Mo., on or before the 30th of March, 1854.

A medal, not to exceed fifty dollars in value, will be awarded by the Medical Society of Virginia, for the best essay upon any medical subject. Communications should be addressed, *pre-paid*, to Dr. R. W. Haxall, Richmond, Va., before March 1st, 1854.

The committee of the Fiske Fund Prize (Drs. Mauran, Clapp, and Ballou,) will pay fifty dollars for the best dissertation on each of the following subjects : 1. *Neuralgia, its history, nature, and best mode of treatment* ; 2. *Puerperal peritonitis, its history, nature, and best mode of treatment*. Communications must be forwarded to Dr. J. Mauran, Providence, Rhode Island, before the 10th of May 1854. The following subjects are proposed for 1855. 1. *Diseases of the hip-joint* ; 2. *Croup*.

The Boylston Medical Prize questions for 1854 are :—1. *On the constitutional treatment of syphilis* ; 2. *On the non-malignant diseases of the uterus*. Dissertations on these subjects must be transmitted to John C. Warren, M. D., before the first Wednesday in April, 1854. The following subject is offered for 1855 : *On the diagnosis of diseases of the urinary organs*. The prizes are gold medals or premiums of sixty dollars.

DR. E. C. FISHER, of Richmond, has been appointed to superintend the construction of a lunatic asylum which the state of North Carolina is building in the vicinity of Raleigh. When the buildings are complete, Dr. Fisher will assume the medical charge of this institution. Dr. Fisher was formerly assistant physician to the Virginia asylum for the insane.

Homœopathy.—The following extract is taken from a clever letter in the *Leicester Journal*, signed “Chirurgius.”—“Homœopathy has had its day. Excepting in Vienna, it is now comparatively little heard of in Germany, and notwithstanding Leipsic is the head quarters of the doctrine, the homœopathic hospital of that city, a small house in the suburbs, contains only eight beds, of which Mr. Lee, who lately visited it, found only two or three occupied. In Paris, M. Andral put it to the test of experience in one of the general hospitals, and the result was a total failure. It was therefore discontinued. He treated 130 to 140 patients in the presence of the homœopaths themselves, adopting every requisite care and precaution, yet in not one instance was he successful. In Russia, a German homœopathist was invested by the Grand Duke Michael with full powers to prove, if possible, its advantages over ordinary treatment on a certain number of patients in the wards of a military hospital. In two months, however, he was not allowed to proceed further. The Russian Government tried likewise the comparative treatment in two hospitals of a number of patients with homœopathic globules, and a number of other patients with no drugs of any kind; and the results were found very similar in both instances. A trial was given at Naples by royal order. The results of the observations were:—1st. That the homœopathic treatment produced no effect; 2d. That it had the serious inconvenience, in several of the patients, of preventing the employment of remedies by which they might be cured. In London, there are two homœopathic hospitals, both of which are in a declining state, and one I hear is now about closing, if not closed, for want of funds. A celebrated physician speaks of it thus:—‘Everything in it, and out of it, fully confirms the view, that, as to practice, homœopathy is truly a nonentity; it is literally, as your author Huc says, the swallowing of names only.’ To swallow the name of a remedy or the remedy itself, comes (say the Tartars) to precisely the same thing. Homœopathists cannot point out a single medical authority now authorising homœopathy. So much for its decline. The gradual progress of medical science sufficiently shows that we do not let our patients die, as homœopaths do. Witness such facts as the following:—

IN LONDON.

			Died under 5 years.
From 1730 to 1749, out of every 100 children born,			73
“ 1750 to 1769,	“	“	63
“ 1770 to 1789,	“	“	51
“ 1790 to 1810,	“	“	41
“ 1810 to 1829,	“	“	31

Regarding the capability of the public to judge the value of medical remedies in curing disease, I quote Archbishop Whately:—‘Nothing is more common than to hear a person state confidently, as from his own experience, that such and such a patient was cured by this or that remedy; whereas, all that he knows is, that he took the medicine and recovered. A termination and a cure are two vastly different things.’—*London Lancet*.

MEDICAL NEWS AND ITEMS.

The Section of Medicine at the recent Scientific Congress at Amiens, after a long discussion, decided the question of the contagion of Cholera in the affirmative.

They discussed the different modes of treating typhoid fever, and gave the preference to that of M. Leroy (of Bethune), which consists in moderate blood-letting at the outset, the employment of cold drinks and lavements, and the refrigeration of the abdomen by cold lotions. Typhoid fever, according to the Section, is a phlegmasia and not a pyrexia. It is a follicular inflammation, differing entirely from the putrid fever of the ancients, and the adynamic fever of Pinel.

After paying a tribute to the noble researches of M. Chatin* on the absence of iodine in the waters of countries in which goitre and cretinism are endemic, the Section examined the methods of rendering the inhalation of chloroform exempt from danger, but decided nothing positively on this subject. The method of M. Charrier, veterinary surgeon at Rheims, of ovariectomy in cows, is highly commended. This surgeon extirpates the ovaries of cows by an incision through the superior wall of the vagina, safely and with but little pain. Cows thus treated continue to give excellent milk for a long period; their weight is doubled, and their flesh is greatly improved in quality. The benefits of this discovery are valued at twelve millions of dollars.

The Section completed its labours by preparing a plan for a grand medical benevolent college, similar to the one which has been recently established in England, at which a hundred old and infirm physicians should be supported, and two hundred physicians' sons should be educated at the expense of the State. This project was received with great favour by the Imperial Academy of Medicine, and it is to be hoped that it will be carried out.

SERVETUS.—A correspondent writes us “that Thursday last, the 27th inst., was the three hundredth anniversary of the martyrdom of Michael Servetus, the

* See *Va. Med. and Surg. Journal*, Vol. I. p. 306.

learned anatomist, who was burned at Geneva, Switzerland, for his honest and fearless defence of his convictions of Christian truth. The instrumentality of John Calvin in that death will always tarnish his name. As I stood a few years ago upon the spot where the noble martyr ascended to heaven in his chariot of fire, I could not but grieve that no church had been erected upon it, as a memorial of that eventful period of Protestant History."—*Transcript*.

The Jenner Testimonial.—This merited testimonial to an immortal benefactor of mankind will be executed with all possible dispatch. With this object subscriptions are being raised throughout every kingdom. The United States has raised 1,600 dollars,—a larger sum than any other country has subscribed.

M. JOBERT (de Lamballe), to facilitate his method of treating some affections of the uterine neck by direct cauterization, has invented an intra-uterine speculum; this instrument is introduced, through a vaginal speculum, into the cavity of the cervix, and, its valves being expanded, it is said to allow applications to be made with great accuracy to any spot which the operator desires to cauterize.

The Sarsaparilla Mania.—There is an evident affinity between physic and the dogs—a fact that shows the master-mind of Shakspeare in suggesting the throwing of the former to the latter; for it is clear that every medicine, like every dog, has its day. Pills have had their popularity, and elixirs have had their run. Lozenges have taken their turn on the wheel of fortune, and even pastes have been stuck to for a time by crowds of adherents, but the period has at length arrived for sarsaparilla to have its fling. Everybody is being asked in a hundred different ways to buy sarsaparilla at almost a hundred different establishments. At one concern we are tempted by a gaudy picture of a heavily freighted vessel arriving amid enthusiastic millions, eager to purchase its cargo of sarsaparilla; and it is delicately hinted to us that we should rush to purchase a bottle of that precious decoction which is the object of so much interest to assembled crowds. At another shop we are allured by full length portraits of our own Queen Victoria and the American President, both of whom it is ingeniously insinuated, are large consumers of sarsaparilla, and thus are supposed to preserve the excellent constitutions of the countries over which they are in authority. A few doors further off, we are enticed by a portrait of a bald-headed individual, and we are requested to apply for "Old Dr. Jacob Townsend's Sarsaparilla," which we have no sooner made up our minds *not* to do, than we are reminded that there is a still older Doctor Jacob Townsend, with still better sarsaparilla, a few doors off. Having crossed over to avoid the sarsaparilla nuisance, we find ourselves assailed by men whose chests are placarded with an invitation to try somebody's else's genuine article; and having recrossed in disgust, we tumble into the arms of the bill-deliverer of the Hygeist, who offers to pour his own peculiar sarsaparilla down the throats of the public at a contemptibly low figure. One would think that London had gone sarsaparilla mad, to judge by the present state of the Strand. For our own parts, we look at the sarsaparilla movement as belonging to the *haute école* of humbug; or, to make use of a characteristic illustration, we regard it as quackery *pur sang*.—*Punch*.

Dr. GEORGE C. SHATTUCK, of Boston, has recently given fourteen thousand dollars to Harvard University, for the purpose of placing on a permanent foundation the chair of morbid anatomy in that institution. In consequence of this munificent donation, the president and fellows of the University have decided that this professorship shall be called the "Shattuck Professorship of Morbid Anatomy."

A new petroleum, or oil spring, has been discovered in Western Virginia, near the forks of Hughes river. It furnishes about fourteen gallons of oil every fifth day. The oil may be burned in lamps, and may be used for dressing leather, instead of fish oil, but it makes the leather porous. It is recommended as an application in bruises and sprains. This recommendation probably emanates from the scientific proprietors.

The repeated failure of the potato crop in Europe has made it an object of great importance to find some substitute for this universal article of food. We read in the *compte-rendu* of the meeting of the Institute of France of August 22d, a report by M. Basset upon a plant recently proposed for this purpose. The *frittilaria imperialis* has a bulbous root which constitutes an agreeable and nutritious article of diet. Its savour resembles that of arrow root. It contains a considerable proportion of starch (50 to 60 in 100), and alcohol can be readily obtained from it. M. Basset believes that it will prove to be a valuable alimentary substance, but that it will be especially useful in furnishing an abundant supply of starch, and thus permitting the potato to be used entirely for alimentary purposes.

The cultivation of the camphor tree (*camphora officinarum*), has recently been introduced in Louisiana.

The widow of the late Dr. M. Moir, the "Delta" of *Blackwood*, a surgeon of high repute, has received a pension of £ 100 per annum, from Her Majesty. This is, we believe, the first instance in which a medical man, or his relations, has obtained a pension for literary pursuits, independent of his profession.

We have been pained to learn, from a paper sent to us by Dr. Bennett Dowler, the eminent physiologist of New Orleans, that he has recently been the victim of a most atrocious and dastardly assault.

Some weeks since, when about to retire for the night, Dr. Dowler discovered a ruffianly fellow in his house. Instead of obeying his order to leave the house, the intruder attacked Dr. Dowler, and before assistance could be obtained, Dr. Dowler had received several severe contusions, and two of his ribs were fractured.

A recent number of the *N. O. Delta* contains some very grave charges against the judicial authorities of New Orleans, for their carelessness in suffering this criminal to escape.

Dr. John M. Snyder, a native of Jefferson county, has been appointed to the chair of surgery in the Georgetown College, in place of Dr. Leiberman, resigned.

NECROLOGICAL RECORD.

COCHRAN.—Dr. William Cochran, one of the oldest physicians of Louisville, Ky., died of yellow fever at Biloxi, Miss., on the 20th August last. The profession in Louisville have passed resolutions expressive of their profound regret at this melancholy event.

BUCKNER.—Dr. P. J. Buckner died recently at his residence in Cincinnati. He had acquired some reputation as an operator in ovarian disease.

WARNER.—Dr. Richard Warner, president of the Connecticut State Medical Society, died at Cromwell, on the 29th of September, at the age of 58. The immediate cause of his death was a rupture of the gall-bladder, produced by violent vomiting.

WARING.—Dr. William L. Waring, a popular young physician of Essex co., Va., was recently killed by an insane person, while on his way to Tappahannock. It was with difficulty that the unhappy wretch, who was the cause of this melancholy catastrophe, could be preserved from the fury of the populace.

PATTON.—The *Lewisburg Chronicle* announces the death of Dr. William N. Patton, of Greenbrier, Va.

DUBARRY.—The naval department have received advices of the death of Dr. Dubarry, one of the senior surgeons of the navy. He was the last fleet surgeon of the East Indian squadron.

WATSON.—Dr. George Watson, for many years an eminent surgeon in Richmond, died on the 12th of October last, at his country residence in Louisa, at an advanced age.

ARAGO.—Francois Dominique Arago, the illustrious astronomer and meteorologist, perpetual secretary of the Institute of France, died on the 2d of October, at the age of 67 years.

A Manual of Obstetrics. By THOMAS F. COCK, M. D. Small 8vo. pp. 250. New York: S. S. & W. Wood. 1853. (From Harrold and Murray.)

This is an expositor of midwifery facts, designed to be useful to young gentlemen neither overburdened with brains nor favoured with strong memories; a mis-named *multum in parvo*, suited only to minds of tender years—to those who have not yet cut their wisdom teeth.

We are not certain, that the work is the best that could be devised, even for those students who have but one short year to swallow (digestion being out of the question) the whole circle of medical, surgical, and obstetrical science. Instead of an epitome of important principles, it is a parrot-roll of a multitude of terms. We cannot recommend it even to the *grinding* fraternity.

THE
VIRGINIA
MEDICAL AND SURGICAL JOURNAL
FOR DECEMBER 1853.

ART. I.—*On the Diseases and Mortality of Seamen.* By GEORGE L. UPSHUR, A. M., M. D., Surgeon to the U. S. Marine Hospital, Norfolk; Member of the Am. Med. Association; Fellow of the Med. Society of Virginia, &c., &c.

The Marine Hospital at the port of Norfolk was established in 1799, the first case of disease being admitted on the 6th of August of that year. The records of the hospital, so far as the number of admissions, deaths, and discharges, together with the diagnosis of each case is concerned, have been regularly kept up to the present time. It is much to be regretted, that a case-book was not also kept by the surgeons who have successively had charge of the establishment since its foundation. There is enough left, however, from which to deduce some important statistical facts in reference to the diseases and mortality in our merchant marine.

The hospital is beautifully situated at the head of the harbor, on a peninsular formed by the division of the Elizabeth river into its southern and eastern branches; and commands a fine view of the entire harbour, as far down as the eye can reach, with Norfolk and Portsmouth on either side, and the Naval hospital, Fort Norfolk, Crancy island, and the mouth of James river in the distance.

The building consists of a centre and two wings, containing large, well ventilated wards capable of affording comfortable accommodations for about sixty patients. The gardens and grounds are handsomely laid off and decorated with a variety of ornamental trees—the fine taste displayed in their arrangement being due chiefly to the former efficient surgeon, Dr. E. O. Balfour.

Up to the 1st of October 1853, there had been admitted into the

VOL. II.—22

hospital 6,883 cases, among which there were 685 deaths, or 9.95 per cent. The following tables will show, at a glance, the number of cases of each disease, with the per centage of mortality, together with the relative per centage to the whole number of cases admitted.

Diseases Affecting the System Generally.

	Cases.	Per Cent.	Deaths.	Per Cent.
Fever, - - -	2173	31.57	274	12.6
Rheumatism, - - -	496	7.2	19	3.8
Debility, - - -	116	1.68	12	10.3
Dropsy, - - -	74	1.07	11	14.8
Scurvy, - - -	36	.5	2	5.55
Scrofula, - - -	17	.24	2	11.8
Cancer, - - -	11	.16	1	9.
Cachexia, - - -	4	.06	2	50.
Total, - - -	2927	42.5	323	11.

Nervous System.

Delirium Tremens, - - -	55	.8	3	5.5
Paralysis, - - -	28	.4	4	14.3
Apoplexy, - - -	16	.23	14	87.
Lunacy, - - -	8	.11	2	25.
Epilepsy, - - -	5	.07		
Amaurosis, - - -	4	.05		
Cerebritis, - - -	3	.04	3	100.
Tetanus, - - -	2	.03	1	50.
Concussion, - - -	2	.03		
Deafness, - - -	2	.03		
Earache, - - -	2	.03		
Headache, - - -	1			
Coup de Soleil, - - -	1			
Total, - - -	129	1.86	27	20.9

Circulatory System.

Hypertrophy of Heart, - - -	2	.03		
Aneurism, - - -	2	.03	1*	50.
Pericarditis, - - -	1			
Angina Pectoris, - - -	1		1	100.
Total, - - -	6	.09	2	33.33

* Of aorta.

Digestive System.

			Cases.	Per Cent.	Deaths.	Per Cent.
Dysentery,	-	-	209	3.	38	18.
Diarrhoea,	-	-	136	2.	26	19.
Cynanche Tonsillaris,	-	-	28	.4	3	10.8
Cholera Morbus,	-	-	18	.26	3	16.67
Colic,	-	-	15	.21		
Dyspepsia,	-	-	14	.20		
Jaundice,	-	-	10	.14	2	20.
Constipation,	-	-	10	.14		
Cynanche Parotidea,	-	-	9	.13		
Hepatitis,	-	-	4	.05		
Ptyalism,	-	-	3	.04		
Gastritis,	-	-	1			
Tænia,	-	-	1			
Total,			468	6.8	72	15.7

Respiratory System.

Pneumonia,	-	-	134	1.94	35	26.
Catarrh,	-	-	164	1.38		
Phthisis,	-	-	111	1.6	69	62.
Pleuritis,	-	-	46	.67	4	9.
Hemoptysis,	-	-	14	.23	2	14.3
Asthma,	-	-	12	.17	2	16.67
Bronchitis,	-	-	12	.17	5	41.
Laryngitis,	-	-	3	.04		
Hydrothorax,	-	-	3	.04	3	100.
Epistaxis,	-	-	2	.03		
Aphonia,	-	-	1			
Total,			502	7.3	120	23.9

Genito-Urinary System.

Venereal Disease,	-	-	1083	15.73	14	1.3
Orchitis,	-	-	52	.75		
Stricture,	-	-	24	.34	1	4.
Phimosis,	-	-	13	.19		
Ischuria,	-	-	14	.20		
Nephritis,	-	-	4	.05	2	50.

			Cases.	Per Cent.	Deaths.	Per Cent.
Hydrocele,	-	-	3	.04		
Stone,	-	-	2	.03		
Cystitis,	-	-	2	.03		
			<hr/>	<hr/>	<hr/>	<hr/>
Total,	-		1197	17.39	27	2.25

Tegumentary System.

Small Pox,	-	-	194	2.8	54	28.
Ulcers,	-	-	342	5.	13	3.8
Rubeola,	-	-	34	.49	2	6.
Erysipelas,	-	-	21	.3		
Whitlow,	-	-	13	.19		
Gangrene,	-	-	10	.14	4	40.
Herpes,	-	-	3	.04		
Psora,	-	-	3	.04		
Anthrax,	-	-	2	.03		
Scarlatina,	-	-	1			
Periostitis,	-	-	1			
Tinea Capitis,	-	-	1			
			<hr/>	<hr/>	<hr/>	<hr/>
Total,	-		625	9.	73	11.6

Surgery.

Contusions, &c.	-	-	596	8.65	33	5.5
Fractures,	-	-	89	1.3	4*	4.5
Abscess,	-	-	63	.9	1	1.6
Ophthalmia,	-	-	35	.5		
Luxations,	-	-	13	.19		
Hernia,	-	-	27	.4	2	7.6
Hæmorrhoids,	-	-	17	.26		
Fistula in Ano,	-	-	9	.13		
Fistula in Perineo,	-	-	6	.09	1	16.67
Exostosis,	-	-	4	.05		
Tumours,	-	-	4	.05		
Caries,	-	-	1			
Fistula Lachrymalis,	-		1			
			<hr/>	<hr/>	<hr/>	<hr/>
Total,	-		865	12.5	41	4.74

* Three of skull and one of thigh.

Summary.

From this analysis it appears, that by far the most frequent diseases among seamen are fever, venereal affections, and those which originate from external violence, the proportion being relatively, 38.75, 17. and 10 per cent. of all the cases.

The tables show that those who "go down to the sea in ships" offer no exception to the well established fact, that fever, in its various forms, is man's greatest foe, and annually destroys at least 30 per cent. of those who die. Inflammatory affections of the thoracic viscera too, are shown to be very common among seamen, and more fatal than upon shore. This is doubtless due to the exposure to which the sailor is necessarily subjected, and the impossibility of obtaining medical aid as early as it is required in such acute diseases.

The reader will be struck with the very small proportion of diseases of the nervous and circulatory systems. Throwing aside *delirium tremens*, which is a self-induced disease, and the proportion of nervous affections is not much over 1 per cent., while those of the circulatory system do not exceed .09 per cent.

Phthisis is a comparatively rare affection among seamen, there being only 111 out of nearly 7,000 cases, or 1.6 per cent.

It would appear that the largest per centage of mortality is to be found among the inflammatory diseases of the thorax and abdomen, and in cases of small-pox, the proportion being 24, 18.5, and 28 per cent.

Under the head of contusions, etc., are included *burns* and *frost bites*, which together constitute at least 25 per cent. of the affections caused by external agents. The proportion of fractures and luxations is small, while ulcers occupy quite a conspicuous position, being 5 per cent. of all the cases.

We find also a very small proportion of ophthalmic diseases, and very few of the exanthemata, exclusive of small-pox.

There is another fact which it was difficult to introduce into the tables, but which is suggestive of reflection. The mortality in fever cases is less by 50 per cent. from the year 1825. Now quinine, the great anti-febrile principle of Peruvian bark, came into general use about this time, and may not the decrease of the mortality be attributable to this agent? We know that although bark had been used many years before, its bulk renders it very objectionable in a vast number of cases where the quinine may be advantageously given.

If the means were at hand, it would be exceedingly interesting to compare the duration and mortality of fevers formerly, with their duration and mortality now, when the dogma, that "quinine given in the febrile stage is death," no longer finds a foothold in progressive medicine.

There are other matters of interest connected with the tables, and which will appear from a careful examination of them. It is unnecessary, therefore, to call further attention to them.

ART. II.—*On the use of Chloroform.* By EDWARD WARREN, M. D., of Edenton, North Carolina.

The introduction of chloroform among therapeutical agents, has certainly been productive of inestimable blessings to the race.

It has not only alleviated suffering, and inspired courage for protracted and difficult operations, but has proved the prolific source of honour and success to the medical profession.

Believing that the employment of chloroform is in no respect commensurate with its merits, I have concluded to publish this paper, with the hope of inducing its more general administration in the treatment of disease.

In the first place, I shall refer to my experience with this remedy, and secondly, shall endeavour to explain its effects on the human system.

In obstetrical cases, I have never wholly subscribed to Dr. Simpson's views, or entirely followed his example in the administration of this medicine;—but frequently, when the pains have been excessive, I have used just enough chloroform to render the system, in a measure insensible to them, and in some instances, a sufficient quantity to produce complete unconsciousness at the critical moment.

I have used it with success in a case of violent puerperal convulsions, occurring in connexion with the first labour of a young, robust, and healthy negro woman. When seen by my father, Dr. W. C. Warren, and myself, the patient had already been several hours in labour. On examination, we found the child's head, firmly impacted in the inferior strait, and the uterus laboring violently to expel its contents. No

alteration had taken place in the parts for some time, and it was evident, the woman could not be delivered without assistance. Soon after we entered the room, she was seized with violent convulsions, and continued to suffer with them at each successive pain, even after the free use of the lancet, cups, cold applications to the head, warm pediluvia, enemata, etc. All attempts at the introduction of instruments, and indeed every interference with the womb, brought on violent convulsions. Observing, that there was nothing present particularly indicative of cerebral congestion, we concluded that the convulsions were simply nervous or hysterical, and determined to substitute the inhalation of chloroform, for the remedies already employed. The effect was magical. In a few moments she was rendered insensible, remained in that condition until delivered with the forceps, of a living child, and finally awoke entirely ignorant of what had occurred during her anæsthetic slumber. No injury resulted from the use of the chloroform, and no convulsive symptom subsequently presented itself; but she suffered for several days after the birth of her child, with a violent attack of peritonitis, from which she was with great difficulty relieved.

This case suggests another, in which the importance of chloroform, both to the patient and physician, so clearly manifested itself, that I cannot resist alluding to it in this connexion.

Some months since I was called to a young woman in her first labour. The presentation was natural, the pelvis well developed, and the uterine contractions sufficiently strong, and no difficulty was experienced with the case, until after the birth of the child. Then, unfortunately, the womb failed to contract properly, and the placenta was retained. After waiting patiently for some time, and finding no response to the various remedies resorted to, I determined to introduce my hand into the womb. The patient however, positively and obstinately refused to submit to this operation. After wasting several hours in fruitless efforts to overcome the patient's pertinacious resolution. I sent for Dr. W. C. Warren. He arrived presently, but his arguments and persuasions were equally inefficacious. We came to the conclusion to use chloroform, and to deliver the placenta whilst the patient was insensible. When anæsthesia was induced, I detached the placenta, after overcoming a powerful hour-glass contraction of the womb.

It is true that there was nothing original in the management of these cases, but they certainly demonstrate to the obstetrician, the necessity

of having chloroform always at hand, and show the important purposes it may subserve in certain contingencies.

In hysteria, I have not only succeeded in arresting the spasms, and in calming the nervous excitement incident to this affection, by the free inhalation of chloroform, but I have known most decided advantages result from the internal exhibition of this remedy. So well assured am I of its remedial properties that whenever called to a case in which hysterical symptoms present themselves, I endeavour to subdue them by allowing the patient to inhale chloroform, and in many instances, succeed in bringing the sufferer to a state of quiet and composure with but little difficulty or delay. If this method fail, I then apply chloroform along the entire length of the spine, by means of strips of linen saturated with it, and at the same time, administer forty drops every thirty minutes, either by the mouth or rectum. Two or three doses, given in this way, will often produce the desired effect; it is inexpedient to administer more, because of the great susceptibility of the mucous coat to the action of this agent, and the facility with which inflammation may be originated in that membrane. In fact, I have known a single dose, afford immediate and entire relief to a lady, who for years had been a victim to attacks of this malady, of so much obstinacy and violence, as to defy the skill of several excellent physicians. Frequently, by resorting alone to local applications along the spine and extremities, I have succeeded in warding off hysterical paroxysms. Nothing connected with this protean disease gives more trouble to the practitioner, or distress to the patient, than that symptom of which so many complain, under the name of nervous head-ache. It is well known, that many women cannot approach their catamenial period, without suffering in this way, whilst others are attacked so soon as the slightest derangement of the menstrual function is experienced. Experience has convinced me, that there is no remedy from which more happy effects may be expected under these circumstances, than from that agent, whose properties form the subject of the present paper. By applying linen strips well moistened with chloroform, successively to the temples, forehead, nape of the neck, and epigastrium, complete relief will be afforded in many cases, whilst some improvement may be expected in every instance. If other hysterical symptoms manifest themselves, great benefit may be derived from the exhibition of a dose of chloroform *per anum*.

All who have given the agent in question a fair trial in the treat-

ment of this disease, must agree, that in many instances, its action is as certain as that of any specific recognized by the medical world, and will unite with me, in recommending it to the consideration of those who have failed to employ it in their practice.

It is proper to mention, that it is unnecessary to administer chloroform by the rectum, except when patients have difficulty of deglutition, suffer from excessive nausea, or are much prostrated by the violence of the attack. In cases attended with much depression, it seems to possess the power, not only of arresting the convulsive movement from which enervation results, but also of arousing the dormant energies of the system, by means of its violent action on the surface with which it is brought in contact; thus subserving two most important purposes, and accomplishing a result, which could be effected by no other remedy. It is so powerful an irritant to the mucous membrane, as to render an increase of the quantity thus administered, according to the usual ratio, not only unnecessary, but dangerous in the extreme.

In *colic*, I have found chloroform particularly useful when used in connexion with and as an assistant to, other remedies. As the prominent feature of this disease is a spasmodic contraction of the muscular coat of the intestines, the propriety of employing in its treatment an agent, which possesses properties so decidedly sedative and relaxing, is apparent.

Of course, the first step indicated, is to relieve the intense pain with which the patient suffers, and then to remove the cause of the abnormal action in the tissues involved. As soon as practicable, I allow the patient to inhale chloroform, in sufficient quantity to produce more or less insensibility according to the urgency of the symptoms, and the constitution of the individual under treatment. In addition to this, I administer forty drops by the mouth, in combination with opium, and apply it freely to the abdomen directly over the seat of pain. In this way, the patient is kept quiet, whilst other means are being used to empty the bowels of their irritating contents and to give permanent relief to the sufferer. Sometimes when the contraction of the muscular coat is obstinate, and great difficulty is experienced in overcoming the constipation resulting from it, the addition of a few drops of chloroform to the enemata employed, will so increase their stimulating properties, as to accomplish the desired object, without difficulty and

with despatch. If food has been recently taken, or has not been digested, it is highly important to precede the treatment just referred to, by a powerful and prompt emetic in order to evacuate the stomach thoroughly and without delay.

In *fever*, the happiest effects may sometimes be expected from the application of chloroform to the spine, epigastrium, and temples, when the patient suffers with excessive nausea head-ache, restlessness, and general malaise incident to febrile excitement. Its employment however, is contra-indicated, when there is great heat, dryness of surface, or much predisposition to cutaneous irritation. In the cold stage also, it will be found a valuable auxiliary to the other remedies usually called into requisition in order to prevent congestion. Under these circumstances, it should be applied freely to the spine, stomach and extremities in the manner already described.

In *pneumonia*, I have never felt willing to trust entirely to the remedial properties of chloroform, but have used it with decided advantage in connexion with other remedies. Though never able to discover any decided abatement of the pulmonary congestion or inflammation, I have found its free inhalation always attended with some diminution of the local pain, and a feeling of comfort and improvement on the part of the patient. Sometimes when applied to the side, immediately above the inflamed portion of the lung, it will afford for the time decided relief to the sufferer. I have seen it employed with benefit in asthma and hooping cough, and have no doubt it would prove, in some degree useful even in tubercular affections of the lungs, if inhaled cautiously and in small quantities.

The convulsions of children require as much discrimination and judgment in their treatment as any class of affections with which the physician is brought in contact.

In many instances, it is exceedingly difficult to decide, whether the convulsions are caused by positive congestion of the nervous centres, or some local irritation indirectly affecting the whole system. When the face is flushed, the head hot, the eyes unsteady in their orbits—with their pupils much contracted or dilated,—and the pulse full, frequent, or hard and quick, I rely chiefly on the lancet, free purgation with calomel,—which I endeavour to assist by enemata,—cold applications, leeches or cups to the head, warm bathing, and poultices to the abdomen. On the other hand, when the head is not warmer than the body, and the pulse is irregular and quick without possessing much volume

or force, I immediately proceed to wash out the bowels with injections of assafoetida and warm water, use warm baths, apply mustard plasters to the extremities and between the shoulders, and cover the abdomen with warm fomentations. Of course, under all circumstances, it is proper to scarify the gums, if they require it, and to remove all other apparent causes of irritation. If the convulsions are not arrested by these measures, I then compel the patient to inhale chloroform, apply it to the spine, saturate the mustard plasters on the extremities with it, and give small quantities by the mouth or rectum. I have repeatedly saved patients by this course of treatment, when all other remedies had entirely failed, and death seemed inevitable. And even when positive congestion of the brain contra-indicated its administration by the lungs, I have seen decided benefits result from its local application to the extremities, and its employment as an enema. I was first induced to exhibit this agent per rectum, by the experience of a medical friend, who having been called to a child, apparently *in articulo mortis*, from the violence of a convulsive attack, succeeded in reviving and restoring it, by the employment of a chloroform injection, to which he resorted more in desperation than with a hope of a favorable issue.

Whilst referring to this subject, I cannot avoid mentioning the fact, that during the summer and fall of 1852, nearly every case of fever in children which came under my observation was attended with convulsions, whilst but very few have suffered in that way during the present year.

Having thus referred to some of my experience with chloroform in the treatment of various diseases, I shall now endeavour to account for the results alluded to in the preceding pages of this paper.

(1.) When inhaled, it acts directly on the brain, and through that organ on the whole system. As to the particular manner in which the influence thus generated, operates in the production of anæsthetic effects a variety of conflicting opinions are entertained by the profession. The fact, established by the observations of M. Robin, and others, that during the administration of chloroform, the fluid circulating in the arteries presents the colour and properties of venous blood,—taken in connexion with the known consequences of an interruption of the aerating process,—naturally points to the retention of carbonic acid as in *some way* associated with the condition now under consideration. But that the anæsthetic state cannot be accounted for by making it

an effect of which the incomplete conversion of venous into arterial blood is the *direct cause*, is perfectly evident, since when carbonic acid and chloroform are taken into the lungs different results are produced. Is it not possible then, to solve the whole mystery, by ascribing the phenomenon of anæsthesia, to the action of some agent which is *developed* by the retention of carbonic acid in the blood?

May not carbonic oxide, the CO of chemistry, be produced by the breaking up of the carbonic acid, with which the blood is filled, in consequence of the demand made upon it by the tissues for oxygen, or in some other way? And is there not such an identity between the symptoms resulting from the action of this agent, and the anæsthetic state as to justify the belief that the same cause has operated in their production? These questions apparently require affirmative answers; and I can but express a suspicion, that subsequent investigation will substantiate the views thus interrogatively shadowed forth.

When the brain is thus affected, consciousness is not only destroyed but the normal amount of nervous influence is not generated, and the absence of this necessary supply produces that condition of weakness and relaxation which attends the inhalation of chloroform. This fact fully explains its action in spasmodic affections, and justifies its employment in the cases mentioned in this communication.

(2.) When taken into the stomach it seems to act particularly on the spinal cord, and to exert a special influence on the motor nerves.

Whilst I have never been able to make any impression on the brain, by this method of exhibiting chloroform, I have frequently witnessed its sedative effect on that portion of the nervous system directly concerned in giving action to muscular tissue. Its antispasmodic action under such circumstances, is evidently owing to the fact, that it exerts some specific power on the nerves, by which they are rendered bad conductors of nervous influence, and become the instruments through which the over-excited muscles are restrained.

(3.) When employed as a local application, it is both a rubefacient, and a topical sedative. Its influence is chiefly expended on the nerves of sensation and indirectly through them on the whole nervous mass. So powerful and immediate in its action on the skin, that in all cases calling for a prompt and decided impression on the system, nothing can be found more worthy of reliance than mustard plasters well saturated with chloroform and freely applied to the surface. As soon as they are felt by the patient, or much redness of the skin is pro-

duced, they should be removed at once, in order to avoid their secondary sedative effect on the part. This intimate union of sedative and irritating properties certainly gives some plausibility to the opinion of Billing in regard to the action of rubefacients, and demands for the subject still farther investigation and research.

In conclusion, I can but say, that taking into consideration the anæsthetic properties of chloroform, its action as an antispasmodic, and the admirable results which frequently attend its employment for equalizing of the circulation, abating nervous excitement, and removing local pain, but few remedies are capable of fulfilling so many varied and important indications, and none deserve a more exalted place in the confidence of the profession.

ART. III.—*Of acute Peritonitis and its Diagnosis in Infants at the Breast.* By DR. ISIDORE HENRIETTE, Physician to the Foundling Hospital of Brussels. [*Journal de Médecine de Bruxelles.*]

The great frequency of affections of the system of serous membranes in infants at the breast, is a subject worthy of the deepest consideration of those who devote special attention to the study and treatment of the diseases of children. The peritoneum, the pericardium, the pleura, the meninges, far more frequently than is believed, present pathological alterations which prove the peculiar tendency of these exhalent organs to become affected in children of early years. With the exception of meningitis, the symptomatologic manifestations of which are usually striking, these diseases are diagnosed with difficulty. We do not mean to say that pleurisy, pericarditis, and inflammation of the peritoneum can only be recognized after death, but that the functional disturbances which they create are frequently so slight as to require on the part of the physician the greatest attention.

We shall attempt to extricate the latter disease from the obscurities which surround it, by coördinating the elements of its diagnosis which have been furnished by authors, and describing what we have observed ourselves. We shall establish, finally, its differential diagnosis from entero-colitis, a frequent disease of infancy which may be readily confounded with peritonitis.

In the first place, if we seek for the cause of idiopathic peritonitis in young children we are quickly at a loss. Its sudden development is not the least strange peculiarity of this affection. We know that in the adult spontaneous peritonitis is rarely observed, and that it is ordinarily encountered only in those peculiar conditions which are produced by the puerperal state, by traumatic lesions, and by perforations of the digestive tube. Its etiology, then, is most uncertain. In the two cases which have occurred in our service, without having recourse to suppositions and hypotheses, no cause could be inferred; it is important to mention that there was nothing abnormal in the umbilical cicatrix.

In the adult, the symptoms of peritonitis are well marked; it is difficult to mistake them: the symptomatology is so plain, that without a want of experience that can only be admitted in young persons upon their entrance upon the profession, it is impossible to avoid a rigorous diagnosis.

Is it so in infants? No. Here we are destitute of the information afforded by the patient; here the disease is not reflected, as in the adult, by the contracted face, the small, corded, peritoneal pulse. Pain upon pressure exists, indeed, and meteorism; but these two morbid manifestations occur also in affections of the intestinal tube, and yet in a great measure the diagnosis must be based upon them. It is therefore well to define accurately their conditions, their intensity and progress in peritonitis of young infants, as distinguished from entero-colitis.

The onset of peritonitis in infants is rapid; we cannot say whether it is preceded by shivering as in adults, but we can assert that it is not announced by any prodromes. The patients that we have observed, enjoyed a satisfactory state of health until the very onset of the peritonitis. As far as we could perceive, until then they presented no unusual symptom.

Entero-colitis commences less suddenly; at first the child refuses the breast, or suckles with indifference for two or three days before the attack; then borborygmus occurs, and the evacuations soon manifest derangement.

In Peritonitis.

The abdominal sensibility is greater than in any disease of the abdominal organs: the child cries upon the slightest pressure.

In Entero-colitis.

The abdominal sensibility is less acute; slight pressure does not cause the child to complain.

In Peritonitis.

Meteorism occurs with the greatest rapidity. At the very commencement of peritonitis the abdomen becomes tympanitic almost while we are looking at it, while, at the same time dullness is established over the inferior or pubic region.

Vomiting is rare, and usually occurs only at the outset; the matters ejected are unmixed, very green, and stain a linen cloth.

Constipation was a marked symptom in the two cases we observed.

The countenance is little changed; the eyes are more fixed than usual, perhaps; the plumpness of form is unaltered.

The child is motionless, and cries when it is moved.

The respiration is entirely thoracic, and is greatly accelerated; the inspirations are short and incomplete.

In Entero-colitis.

Meteorism occurs less rapidly, and always bears a relation to the intensity of the abdominal lesion.

Vomiting is frequent; the matters ejected are almost always mixed, and of a yellowish-green colour.

Diarrhoea is an almost constant phenomenon.

The countenance is rapidly altered; the eyes and mouth are surrounded by blueish rings; emaciation is rapid.

The child frequently flexes its limbs upon the abdomen.

The same symptoms occur but much less strikingly. The diaphragm does not remain motionless and passive as in peritonitis.

Such are the most striking symptoms which we have observed. They differ in some respects, particularly in regard to the appearance of vomited matters and of the countenance, from those described by Billard, almost the only physician who has carefully studied peritonitis in children at the breast, or given a description of it at all complete. This is astonishing, for since this author wrote, infantile pathology has been very extensively explored, and several masterly treatises have been devoted to it. In these, however, this redoubtable affection receives only a passing notice. Some persons may complain of our omission of the signs of peritonitis furnished by the general symptoms and particularly by the pulse. We have not mentioned them because they are identical with those observed in other febrile affections.

CASE I.—*Acute peritonitis; death.*—A male child, forty-two days old, entered the hospital on the 25th of May, 1850. The lower limbs were covered by a papulous syphilitic eruption; a sero-purulent, sometimes sanguinolent, discharge oozed from its nostrils. In consequence of the obstruction of the nose, respiration was laborious and lactation difficult.

The child was placed upon mercurial preparations, and confided to a healthy nurse, and soon became fat and hearty. Towards the end of June the eruptions had disappeared, but the ozaena was not cured. The nurse having conceived a great affection for the child

consented to take the bi-chloride of mercury in order to cure it. The results of this treatment were soon manifested; the child improved most rapidly.

On November 8th, the child became obstinate all at once, uttered cries, refused to take the breast; the face was flushed, the eyes fixed; vomiting of bilious matter occurred. The abdomen became enormously distended; it was hot; it could not be touched without causing the child to cry and to shed tears. Constipation; hurried thoracic respiration; high fever. (*Two leeches near the umbilicus, emollient cataplasms; laxative enema; diet*).

The child cried all night, lying motionless in its crib.

On the 9th, more vomiting; one consistent dejection. The abdomen was very tense and painful. (*Protracted warm bath; four leeches to abdomen; emollients*.)

The child died in the course of the day.

Autopsy 24 hours after death. No emaciation. The peritoneal cavity was filled with a flocculent sero-purulent liquid; there were various intestinal adhesions. The peritoneum was highly injected; there was little or no redness of the intestines, the mucous membrane was healthy; the liver was covered by a purulent layer; the intestines were greatly distended by gas. No other organs presented the slightest alteration, except the nasal bones, which were thickened from periostitis. The umbilical cicatrix was complete, and without redness.

CASE II.—Acute peritonitis: death.—A new-born child was brought to the hospital, Nov. 17th, 1852. It was a female, very small and feeble. The eyes were invaded by a grave purulent ophthalmia. It was put under treatment for this affection, and for a stomatitis (muguet) which supervened shortly after, and, at the commencement of January, all of its functions were well performed, it had gained flesh, and would have left the hospital but for the inclemency of the season.

On the 14th of January, the child became cross, and cried when it was moved, and showed no inclination to nurse. The left lower extremity was œdematous, and was covered by erysipelatous patches. (*Hygienic precautions*).

Jan. 16th. The erysipelas disappeared from the left limb, but invaded the opposite limb.

Jan. 18th. The inflammation abandoned the inferior extremities, and attacked the left side of the trunk and the lower part of the arm. In the evening there was bilious vomiting.

Jan. 19th. The abdomen became enormously distended; the child no longer vomited; the belly was hot, and excessively painful. The slightest touch made the little patient cry. There was dullness at the inferior portion of the abdomen, but fluctuation could not be perceived; the face was flushed, the eyes fixed, the inferior extremities motionless, the respiration incomplete, thoracic; one consistent dejection; fever. The erysipelas was still manifest on the arm. (*Four leeches to the abdomen; emollients; laxatives; diet*).

The child died in the afternoon.

Autopsy.—Liver enormous, fatty, yellow. Sero-purulent liquid in peritoneal cavity; recent false membranes and adhesions of the intestines; a slight amount of purulent serosity in the left pleural cavity. The lungs, spleen, and intestines presented no pathological alteration. The cellular tissue of the left leg and arm were infiltrated by serum. There was nothing abnormal in the articulations.

In this case the peritonitis was discovered during life. The case which preceded it had taught us a useful lesson.

We shall say nothing of the treatment of this disease, except that it is our intention, having derived so little benefit from antiphlogistics and emollients, to combine the mercurial preparations with these, when the occasion presents itself.

We are not, however, very sanguine as to the eventual result of this combined treatment, for death arrives so promptly in this disease, that we can hardly believe that constitutional therapeutical agents can have time to act.

CASE III.—*Acute peritonitis; volvulus; death.*—Since we recorded the preceding observations, we have met with a third case of peritonitis in a new-born child, complicated with volvulus. This is its history:—

A female child, born at the Maternity, was brought to the hospice on the 22d of March 1853, the seventh day after its birth. It was a large infant, of good constitution. Its body was covered by psoriasis guttata. Suspecting a specific cause, although we could not detect the opaline border which Bielt regards as the pathognomonic sign of the venereal affection, we confided the child to a nurse who was already taking mercurial preparations for the cure of a syphilitic child whom she was nursing.

Until the sixth day after her admission, we observed nothing in the little patient; she nursed well, slept well, her functions were well performed, the eruption did not progress; but, on the 28th, we found a radical and menacing change in her situation.

The abdomen was tense; there was considerable meteorism, exquisite sensibility, dullness above the pubes, short and hurried respiration; the countenance was anxious; the eyes were fixed; the limbs were motionless; the child cried when she was moved; she had not urinated since the preceding evening; no vomiting; constipation; feverish pulse; cold extremities; the eruption had faded.

The catheter was passed, but it did not evacuate a single drop of urine. The child was placed in a hot bath, with the hope of bringing back the eruption; the abdomen was fomented, emollient injections were administered, and a table-spoonful of the syrup of manna.

In the afternoon of the 28th, the patient vomited yellowish matters

resembling fæces to the eye, but inodorous. The psoriasis had completely disappeared. The little patient was expiring.

A catheter introduced into the bladder and also into the rectum brought away neither urine or fæces. The diagnosis had been written over the patient's cradle:—Acute peritonitis and volvulus.

The child died, then, on the day upon which the disease commenced.

Autopsy.—Several of our colleagues and resident students of St. John's hospital were present at the post-mortem examination.

The bladder was contracted, it contained not a drop of urine; the peritoneum was highly injected, and contained a turbid flocculent serum; the intestines were glued together by a greyish, semi-liquid substance; the small bowels were strangulated by bands of lymph; the ileum was invaginated; the rectum was empty, whilst the portion of intestine above the obstacle was filled with yellowish liquid. The convex surface of the liver was covered by false membranes; the spleen was enlarged. The lungs, kidneys, encephalon, heart, and other organs were normal.

This observation is interesting in several particulars. It confirms, in the first place, the description we have already given of the symptoms and progress of this disease; and it was accompanied by a phenomenon which is not mentioned by any of the physicians who have written upon the diseases of infancy, a complete suppression of the urinary secretion. As to the causes of this symptom, we can only speculate upon them. There is another important question in connection with this case. Can it be regarded as an example of spontaneous, idiopathic peritonitis. Many physicians deny such a disease altogether, but a careful examination of the above case seems to demonstrate its existence. In fact the first symptom which appeared was the rapid distension of the abdomen, accompanied by the ordinary symptoms of peritonitis in children, with dullness above the pubes, whilst the psoriasis still preserved all its distinctiveness, and showed no tendency to disappear. A metastasis could have been inferred if the abdominal symptoms had followed the disappearance of the cutaneous eruption, but this was not the case.

We shall conclude these brief and incomplete remarks by insisting upon a capital fact, which we noticed in each of our three patients: the rapidity with which effusion and the organization of false membranes occurred. As soon as pain and meteorism were discovered, percussion indicated that effusion and purulent agglutination had also taken place. We have not spoken of fluctuation, because we were unwilling to resort to the manœuvres necessary to detect it, in consequence of the extreme pain which they would produce.

CHRONICLE OF MEDICAL SCIENCE.

The translations and abstracts under this head, are made expressly for this Journal.

ANATOMY AND PHYSIOLOGY.

1. *Researches upon the Archetype and Homologies of the Vertebrate Skeleton.* By RICHARD OWEN.

All those who devote themselves to anatomical science, are aware of the uncertain state in which anatomical philosophy, or the homological branch of anatomy, was left at the death of the illustrious Cuvier and his celebrated colleague Geoffroy Saint-Hilaire; and contemporary savants who still survive, have not forgotten the animated discussions which agitated the close of the career of these two great men.

Two schools arose, or rather were revived* at that time; and since, facts and arguments connected with the highest problems of anatomy have been viewed only through the prism of party-spirit. For many years the habitual studies and meditations of my scientific life have been devoted to a search after those fundamental truths, which lay concealed in the disorder into which philosophical anatomy was thrown upon the disappearance of the two great luminaries of the French school.

In proportion as the homological relations of the different parts of the vertebrate skeleton have been discovered and *established* upon the solid basis of induction, by means of multiplied observations and comparisons, this, the highest branch of anatomical science, has become the object of more attentive study, and each day is better comprehended.

The anthropotomist not only begins to perceive that in order to understand the true nature of the structure of the human body, it is necessary to penetrate to that common type of which it is the extreme modification, but philosophy perceives in these deductions of homological anatomy the demonstration of some of the profoundest views of some of the most powerful minds of antiquity.

In proportion as each individual branch of general science makes real progress, the human mind possesses itself of more general and more lofty truths. From physiology to teleology or scientific theology, the

* For, as M. Flourens has well observed, in his eulogy of Geoffroy: "The war between two philosophies did not commence with Aristotle and Plato, and did not end with Cuvier and Geoffroy."

transition is natural and simple. When one considers the beautiful and numerous evidences of unity of design manifested in the organs of locomotion, for example, evidences which we should be little likely, *a priori*, to anticipate, on account of the great differences in form and volume in these organs; and when, independently of the general conformity in structure in the limbs of different species, we are able to trace a more particular parallelism between the anterior and posterior limbs of the same species, whatever may be the diversity of function for which each is intended,—a serial parallelism or homology which may be traced in each little bone of the tarsus or carpus, from man to the monodactylic horse,—one cannot but be struck by the remarkable concurrence of facts. The imagination is seized with a desire of penetrating further, and the mind is invincibly attracted to seek whether it is not possible to discover the source whence these harmonies proceed.

The principle of final causes or conditions of existence does not satisfy all the conditions of the problem. Will those who defend this opinion pretend that each segment, or even each bone, that exists in the human hand and arm exists in the fin of the whale, because each of these parts is absolutely indispensable to the functions of this inflexible and (*externally*) undivided member? that would little accord with our idea of the easiest method of attaining the desired end. The same reason would prevent us from admitting the large number of bones in the cranium of the chicken to be caused by the necessity of protecting the brain of the young bird in its exit from the shell by an osseous envelope. We perceive, assuredly, and admit the principle of ulterior design in the multiplication of points of ossification in the cranium of the human foetus; but when we find the centres of ossification existing in the same order in the cranium of a kangaroo or of a bird, we cannot but recognise, with Bacon, that final causes are like vestal virgins, beautiful doubtless, but barren, and from which we cannot expect that fruit which should be the recompense of our labour, that is, a comprehension of the law of unity of organic structure.

There exists, nevertheless, a most estimable and numerous class of physiologists, who are disposed to take offence at any expression from which it may be inferred that any portion of created being has been made in vain. Admitting that the only principle which governs the construction of living beings is the absolute and exclusive adaptation of each part to special functions, they receive with disfavour every remark of the kind which we have made in reference to the whale's fin and the head of the chicken, and consider the adage that "nothing is made in vain" as a sufficient refutation of the idea that such a large number of apparently superfluous bones, exist in peculiar order and relation in subordination to another principle; conceiving that the idea of conformity to a type is in opposition to the idea of design.

But, in such discussions, what may be the meaning attached to this phrase (made in vain)? If the teleologist who adopts the dogma of final causes as exclusively governing the organization, seeks to analyze the principle of his belief, he will find, perhaps, that his belief signi-

fies that, so far as he can form a conception of a mechanism directly adapted to a special end, he considers every organic mechanism as having been thus conceived and adapted. In the majority of cases he sees that the adaptation of the organ to its functions accords with the notion of a perfect machine, constructed for a similar end; and, thence he concludes that in the exceptional cases, that is when the known relations of structure cannot be thus interpreted, this structure must, nevertheless, be as necessary for its function, as in the generality of cases, although it appears to be a purely mechanical action, and it is easy to conceive a simpler mechanism to fulfil it. The error arises, perhaps, from his judging of created or natural organs by their analogy with artificial machines. But it is certain that in the cases in which this analogy does not suffice to explain the structure of an organ, this structure does not exist in vain, if a more profound knowledge of its true nature conducts a being endowed with reason to form a more perfect conception of its proper origin and of its Creator.

“The whole of all the orders of relative perfections, says Bonnet, is composed of the absolute perfection of them all; unity of design conducts us to the unity of the intelligence that has conceived it.”

Ignorance or denial of this truth would throw an inscrutable veil over human philosophy.

The disciples of Democritus and Epicurus reasoned thus: If the world was made by a preëxisting spirit or intelligence, that is by a God, there must have been an *idea* or an *example* of the universe before it was created, and, consequently, *knowledge*, in the order of time, as well as in the order of nature, before the existence of things.

Hence the sects of these ancient philosophers argued on the idea of knowledge, in the sense which we give it as acquired by our limited intellects, and not having discovered any indication of an ideal archetype in the world or in any of its parts, concluded that there could not have been any knowledge or intelligence before the commencement of the world as its cause. Thus Lucretius asks:

*Exemplum porro gignundis rebus et ipsa
Notities hominum Divis unde insita primum,
Quid vellent facere ut scirent animoque viderent?*

These philosophers rejected the *Platonic ideas* as pure chimeras, because they were not established upon demonstrations.

Now, however, the recognition of an ideal model as the basis of organization of vertebrate animals, proves that the knowledge of a being such as man existed before man appeared; for the Divine Intelligence, in forming the archetype, possessed the prescience of all its modifications; the idea or archetype was manifested in diverse modifications in organisms, on the surface of our planet, long before the existence of the species of animals in which we now see it developed. Under what natural laws or secondary causes, the succession of species is arranged is as yet an unsolved question. But, if we can conceive of the existence of such causes, as the agents of the Almighty Divinity, and per-

sonify them under the term *Nature*, the past history of our globe teaches us that it has advanced by slow and majestic steps, guided by the light of the archetype, through the ruins of earlier worlds, from the moment when the vertebral idea was first manifested under the old ichthyc garb until the day when it was bodied forth under the glorious vesture of the human form.—*Comptes-rendus de l'Institut de France*. T. xxxvii, p. 389, *et seq.*, Sept. 5th, 1853.

2. *On the Modus Operandi of Fecundation.* By WALDO I. BURNETT, M. D.

With every inquiring mind there is a deep interest connected with the development of animal life. To watch the origin and rise of new forms, to trace the successive phases through which they pass, as the ideas on which they are based become more and more definitely expressed, until finally the perfect animal is produced,—these have been favorite studies from the earliest times with some of the most genial minds, and over which they were accustomed to dwell with increasing delight. But more interesting still, because more wonderful, is the study of those necessary preliminaries of all individual development—the mysterious conditions of fecundation. To observe, after nature has prepared the material, how she puts up a new structure, and to trace the adaptive idea in the laying of each part, require but opportunity united with careful diligence and patience. But to lift the veil beneath which lie hidden the more than mysterious relations of individuality, this is to tread on the confines which separate the material from the immaterial world.

There is no question in physiology so difficult and at the same time so interesting as—*How* is a new individuality started by the conjugation of the sexes; and where so little could be observed, there has been more scope for speculation.

In modern times, however, with certainly better instruments if not better opportunities, we have looked for less talk and more knowledge; and in this respect, it may be justly said that we have approached pretty near that boundary, which, as it is the limitation of that which can be perceived by the senses, is the real confine between the known and the unknown in physical science.

As it would be profitless to notice the labors of those numerous men, who, in this department have written upon what they really knew nothing, yet speculated much, we shall attempt to show the state of our real knowledge on this *ultimatissimum* of physiology—the *modus operandi* of fecundation.

Modern histological studies, have we think, pretty definitely settled two fundamental and important points: 1st. That the ovum is, morphologically, only a nucleolated cell; and 2nd. That the sperm cell is the true homologue of the ovum.

The ovum (fecundated) produces the embryo; the sperm cell the spermatie particle. The embryo and the spermatie particle are the correlative representatives of the female and the male sex. One is the

metamorphosed nucleus (vitellus) of the one; the other the metamorphosed nucleus (nucleus of the daughter cell) of the other. In both, the ovum and the sperm cell, the process of segmentation seems a necessary preliminary to the evolution of the new being.*

The strict correlation between the essential products of the sexes is as wonderful as it is beautifully suggestive of the unity and simplicity of plan by which nature proceeds. This point, so seductive in all its relations, might be dwelt upon in detail, but we will continue with main and general facts. The ovum, as a nucleated or nucleolated cell, continues to grow, and whatever size it may attain to by the endogenous formation within its capsule of new cells, yet, when complete, it is, (even though belonging to the *Ostrich* or *Epiornis*,) morphologically, only a great compound nucleated or nucleolated cell. All these conditions of origin, growth, and maturity, can be satisfactorily studied in the lower animals, and we would especially recommend the compound *Ascidie* for this purpose. The ovum, thus complete, is ready for fecundation.

We have already said that the sperm cell is the analogue, or more properly *homologue*, of the ovum; its origin and development, as we have traced them in all their details, are precisely the same as those of the ovum. The sperm cell increases to a definite size, its nucleus (vitellus) then regularly segments, 2, 4, 8, 16, &c., and the results of this segmentation, are daughter-cells. The condition of the sperm-cell at this moment is like that of the ovum produced by the same process of segmentation. I mean the *mulberry-like* condition. But at this point there is a digression, for with the sperm-cell the nucleus of each of the daughter-cells is changed into a spermatie particle, while with the ovum, the whole mass is metamorphosed into the new being by a process of substitution.

The spermatie particle, then, is only a metamorphosed nucleus of a cell, and, perhaps, were the analogy carried out completely, each daughter-cell would be the representative of a miniature ovum.

Physiologically, the phenomena we have thus briefly described, obtain equally in the vegetable kingdom; for, as recent discoveries have shown, even in the simplest cellular plants there is a conjugation of two kinds of cells, the product of which terminates in a new generation; in the other plants, the superior cryptogamia, and the phanogamia, there are parts which in a developmental as well as morphological point of view, correspond to the essential male and female products of animals.†

Throughout the organized world, therefore, the conditions which wait upon the true generative process are the same—the combination of

* See Researches on the origin, mode of development, and nature of the spermatie particles among the four classes of the Vertebrata.—*Mem. Amer. Acad., N. S.*, v, pt. i, 1853.

† We would refer to a profoundly physiological memoir by Robin, titled: "Ovum, its existence as well in the male as in the female of plants and animals," &c. *Compt. Rend.*, 1849.

the representative products of two distinct sexes—and these products, whatever may be said of their form, are always physiologically the same;—they are cells or cell-products.

Here we would make a general statement which embodies a great deal of physiology on this subject: A true generation must be regarded as resulting only from the conjugation of two opposite sexes, from a sexual process in which the potential representatives of two individuals are united for the elimination of one germ. The germ power thus produced may be extended by gemmation or by fission, but it can be formed only by the act of generation, and its play of extension and prolongation by budding or by division must always be within a certain cycle, and this cycle is recommenced by the act of the new conjugation of the sexes.

In this discussion, we have satisfactorily reached this point that the ovum and the spermatic particle are the potential representatives of the sexes to which they respectively belong. From their union results the condition of fecundation; the grand question now is, what is the *modus operandi* of this fecundating act? Bischoff's view, based upon speculative probabilities rather than upon observation, is, that contact alone of the spermatic particle with the ovum being sufficient for fecundation, impregnation consists in a kind of catalysis which has its exemplification in chemical conditions as enunciated by Liebig, (see loc. cit., p. 425.) But if catalysis embodies conditions in the organic like those of its relations in the inorganic world, it falls very far short of affording the requisite explanation of these phenomena, as we hope soon to show. This field of probabilities and possibilities we shall enter upon again.

Newport's contributions upon the physical phenomena of this subject are far the most complete that we have, and being the results of a most trustworthy observer, they deserve our special attention.

Newport's experiments and observations show, in brief, that contact alone of the spermatic particles with the ovum is requisite for fecundation, that each ovum requires several particles; and that there must be *duration* of this contact. Here is a limit to observation of physical facts, and we regard these important data worthy of full trust, considering the source from which they come. This author discusses briefly the question of the impregnative power, and from the fact that the spermatic particles are sometimes seen to disappear on the surface of the egg-envelopes, he thinks it may be fair to conclude that the agency of this body is material in its operation; on the other hand, the fact of a mere *momentary contact* producing changes in the ovum, suggests in his mind the so-called catalytic power of certain known bodies. But he thinks that neither this last, nor endosmosis, are sufficient to account for the phenomena of this grand act.

The view of Keber, has at least the merit of being unique if nothing more. As long ago as 1838, Martin Barry* announced that he had observed spermatic particles without the ovum. It should be mention-

* Barry, Philos. Transact. 1840, pt. ii, p. 532—1843, pt. i, p. 33.

ed however, that long previous to this, Prevost and Dumas* in their researches found these particles within the envelopes of the eggs of frogs. But Keber's alleged discovery is, that the introduction of the spermatie particles within the ovum, takes place through a special opening, a kind of micropyle, or an infundibuliform passage. This discovery was made upon the eggs of muscles (*Unio* and *Anodonta*.)

The announcement of the presence of such a structure on the ovum is indeed wonderful, and more especially so since other observers, whose attention has been particularly directed to the embryological study of these animals, have failed to notice it, although one would suppose that an apparatus of this kind must be very visible. Keber affirms that he has observed a like structure in the ova of some other animals which he has examined. But, however well fortified he has sought to make his observations, they certainly need more than the usual confirmation, and we cannot but regard it as far from being a settled fact in embryology, that the ovum has a direct structural communication externally for the ingress of spermatie particles to its interior.

After all this discussion of facts, we revert to the primary question, what is the nature of the fecundating act? We have seen that its physical phenomena consists in the contact of active vital spermatie particles with the mature ovum; that this mature ovum, thus effected, experience peculiar changes which terminate finally in the evolution of a new being possessing the characteristics of the male as well as the female parent. It is true that, as was observed by Prevost and Dumas, and as has since been confirmed by Barry, Newport, and others, the spermatie particles may force their way through the envelopes of the egg some distance into its interior, but we regard this as an unessential condition of the fecundatory act; adhering by their heads to the envelopes of the egg, the incessant action of the tails of these bodies would obviously tend to force them inwards, and especially through such homogeneous, soft tissues as the egg-envelopes.

By referring to the resultant phenomena of this fecundating process, we may perhaps gain some insight into the conditional if not the real nature of its agency. We have already said that the spermatie particle is the potential representative of the male; what signification is it to be attached to its mere physical form, that is, whether it is conical, globular, &c., we know not; and this seems the more hidden from our perceptions, from the fact that exactly similar forms and sizes,—in fact, physical relations apparently identical—belong to spermatie particles of animals as widely dissimilar as could be. This fact alone, of the correctness of which we are well assured from our own observations, should be sufficient to convince us that we have here to deal with no very simple relations or properties. But let us pursue the subject a little further. I scarcely need remark, that the offspring partakes equally of the physical peculiarities of both parents. It will at once be perceived, that in no way can the child receive those of the

* Prevost and Dumas, Ann. d. Sc. Nat. ii, p. 233.

father except through the medium of the spermatic particles. And so, however strange it may appear at first, yet the conclusion is irresistible that spermatic particles must contain, concealed within them, in fact must be the vehicles of, not only the general peculiarities of the father as an animal, but mental dispositions also, and as is too often true of our own species, morbid taints superadded to all. It is wholly insufficient to say with Bischoff, that these anomalous conditions belong to the catalytic action; or with Newport, that they may be the exemplification of a force, peculiar and *sui generis*. For there is something above and beyond the wakening of latent forces, of one particle that is positive with another that is negative. The grand fact is, that the act of fecundation includes—whatever may be said of its also vitalizing the ovum—the communication or the transmission of the *individuality* of the male parent to the ovum; and the material organ of this transmission is, exclusively, the spermatic particle. We cannot see that these phenomena have an adequate explanation in any chemical relations of matter yet known, and what is more, we cannot conceive the possibility of this ever being the case, unless, indeed, chemistry gets beyond the domain of physics. Not but that chemistry involves points which are equally obscure, such as affinity, isomorphism, &c., but then the conditions of vitality, and especially the grand manifestation of it in question, certainly seem to us to include relations which have no correlation whatever with those pertaining to inorganic matter. To us the relations and conditions of cells, which are the primordial forms of organization, demand the *teleological* view of organic life.* *Individuality* is the distinguishing feature of organization, and we recognize in it something more than a mere collocation of physical conditions; we regard it as an Idea which exists before organization, which last is only the language in which the Idea is expressed. The conditions of this process of fecundation which we have just reviewed, will accept no other explanation, say what physiologists may about the *unphysical* character of such a view; we must have something beyond mere *combination*, which lies with physics; this we have in *development*, which lies with life.

In conclusion, we may say, that as the domain of science lies with demonstrable phenomena, so its legitimate study is with the sensible and tangible. The conditions of immaterial agencies, and their relations with material forms, must be accepted as pure phenomena incapable of the analysis of ordinary scientific facts. But after all, how much more of an enigma is the process of fecundation than the essence, the primordial cause of everything connected with both the inorganic and organic world about us. Science should put out her long, tentacular arms in all directions, laying hold of the tangible and the sensible, but it should be remembered that the supra-sensible is beyond her pale, and that “*multa esse constant in corpore quorum vim rationemque perspicere nemo nisi Qui fecit potest.*”—*Silliman's Journal*, Nov. 1853.

* See The Relations of Cells to the Physical and Teleological views of Organization, in *Silliman's Journal*, xv, 87, Jan., 1853.

3. *On the Phrenic Nerve.* By Professor LUSCHKA.

In a monograph by Luschka, on the phrenic nerve, the author arrives at the following conclusions:

1. The phrenic is not merely a motor nerve, but a mixed nerve, containing sensory filaments distributed to the pleura, pericardium, and the peritoneum, covering the diaphragm, and on the anterior wall of the belly. It is also distributed to the coronary and suspensory ligaments of the liver.

2. It brings about a double interchange of fibres between the sympathetic and spinal nerves, since organic nerve-fibres go to it from the inferior and occasionally the middle cervical ganglion, and it gives, by its abdominal portion, fibres to the solar plexus.

3. In the majority of cases the phrenic arises but from one cervical nerve—the fourth.

4. The diaphragmatic branches he traces to the tendinous centre, the inferior vena cava, the right auricle, and the liver.

5. In its course over the pericardium it appears to be endangered in diseases of the pleura and lungs, especially tubercular. Hence probably, some of the disturbances of respiration in these complaints.—*Schmidt's Jahrbuch. (Med. Chir. Rev.)*

4. *Discovery of a Substance in the Human Body which gives rise to the same Chemical Reactions as Vegetable Cellulose.* By Professor VIRCHOW, of Wurtzburg.

Purkinje has described a peculiar variety of corpuscles in the human brain, formed of concentric layers, and resembling grains of starch. These amylaceous corpuscles have since been found in many parts, especially in the spinal marrow and about the walls of the ventricles of the brain.

Upon examining the micro-chemical properties of these corpuscles, Virchow has found, that upon adding an aqueous solution of iodine, they assumed a blue tint, which contrasted strongly with the yellowish light transmitted by the surrounding parts. Upon subsequently adding sulphuric acid to the microscopic object, there appeared the bright violet tint which characterizes vegetable cellulose.

The discovery of a vegetable substance in the locality by lesions in which M. Bernard has artificially produced diabetes, seems to have some connection with the glucogenic functions.—*Comptes-rendus. T. xxxviii, p. 422.*

5. *On the Origin of the Fatty Matters of the Economy.* By M. DE QUATREFAGES.

At a recent meeting of the French Academy of Sciences, a report was read, by M. de Quatrefages, upon a memoir of MM. Lecaze-Duthiers and Leriche, entitled: *Researches upon the alimentation of the gall-insect*, which was intended to throw some light upon an important physiological question—the origin of fat.

It is well known that on this subject there are two hypotheses generally professed by physiologists. According to some, fatty matters are always of vegetable origin. They are already formed in vegetables, and are only absorbed by animals, who destroy them by oxidation. Others contend that fatty principles may also have an animal origin, and may be formed in the economy by transformation of alimentary substances, whatever the composition of the latter.

Chemists have not hitherto been able to solve this problem. In order to do so, it was necessary to analyse the whole amount of food, and subsequently the tissues formed from this food. Experiments having been usually practiced on large vertebrate animals, such a process was out of the question. MM. Lecaze and Leriche have therefore experimented upon the *cynips quercusfolii*. Having studied the structure of galls, M. Lecaze observed that they were composed of concentric layers enveloping an alimentary mass, in the centre of which the gall-insect deposits its eggs. This mass, consisting chiefly of starch, is isolated completely. M. Lecaze then associated himself with M. Leriche, in order that his results might be verified by chemistry.

These two collaborators analyzed the alimentary mass and then the entire tissues of the gall insect, and demonstrated that, in the cynips, under the influence of animal life, the elements of starch served in part in the fabrication of fatty matters. They proved, further, that the nitrogen which exists in the food of this insect, is almost entirely consumed in the formation of its tissues.

6. *On the Structure of the Human Retina.* By KOLLIKER and MULLER, Professors at Wurtzburg.

In a memoir addressed to the French Academy of Sciences, on this subject, Professors Kölliker and Müller remark, that, with the exception of certain points on which the researches of Hannover, Valentin, Todd and Bowman, and others, have thrown some light, the complicated anatomy of the retina has hitherto been little understood. Having been long occupied with this part of microscopic anatomy they desired to present to the academy a rapid enumeration of the principal facts which they had observed.

The retina is composed of different layers: 1. of cones and cylinders (*bâtonnets*); 2. of the layer of nucleiform bodies; 3. of the layer of grey matter; 4. of the nervous expansion; 5. of the limiting membrane.

The nervous fibres do not perceive objective light, because the *macula lutea*, which is the most sensitive portion of the retina to light, and which possesses the most exquisite visual perception, does not present the slightest trace of the nervous layer, and, on the other hand these fibres abound in a portion of the retina devoid of all sensation, that is to say, at the insertion of the optic nerve.

There are only left then, the nervous cells, the nucleiform bodies, and the cones and cylindroids, which can be considered as the organs of sensation. The nervous cells are not these organs, since

in every portion of the retina endowed with perception, these cells form superimposed layers (often ten or twelve in number); it is impossible to admit that we could have clear and exact visual impressions, if each ray of light irritated ten or twelve cells. For the same reason the nucleiform bodies do not probably perceive light. Hence there remains only the cones and cylindroids (*bâtonnets*.)

Professors Kölliker and Müller believe that in reality, it is these curious bodies, for which physiology has not yet accounted, that are designed to receive the impressions of light. Their disposition, somewhat in the fashion of mosaic, and their slight diameter, are favourable to exact visual sensations.

They have observed: 1. That all the nervous cells possess one or two prolongations, which, upon leaving their exterior, become confounded with the inner layer of nucleiform bodies; 2. That the corpuscles of this nucleiform layer possess, besides two prolongations continuous with the radiating fibres mentioned above, usually one or two other processes. They suppose that these last processes are in direct relation with the exterior prolongations of the nervous cells; so that sensations, originating in the cones and cylindroids, are transmitted by the radiating fibres to the nerve cells, and thence to the expansion of the optic nerve, which is nothing else than an inter-medium between the organs which perceive light (cones, cylindroids and nerve cells) and the brain.

However this may turn out, even should the hypothesis of the function of the cones and cylindroids be overthrown by ulterior facts, it will still remain true that the fibres of the optic nerve are not directly irritated by the light, and that the organ of direct sensation of light is to be found in the nerve cells of the retina, these cells being either affected directly by the luminous rays, or else through the radiating fibres and cones and cylindroids. We admit, say the authors, that the layer of nervous cells of the retina is a true ganglion, or if the expression is preferred, a true nervous centre. We attribute to it the function of perceiving light, and believe that the optic nerve serves solely to transmit sensations from this centre to the organ of intelligence and consciousness.—*Comptes-rendus*, Sept. 26th, and *L'Union Médicale*, Oct. 6th.

MEDICAL PATHOLOGY AND THERAPEUTICS.

7. *Of the Treatment of the Itch and the Suppression of the Scabies Wards in Hospitals.* By VLEMINCKX, Surgeon-in-chief of the Belgian Army.

A former number of the *Journal des connaissances médico-chirurgicales* (Nov. 15, 1851), described the method by which M. Bazin had

succeeded, at the *Hôpital St. Louis*, in curing itch in two days, and how his successor, M. Hardy, had contrived to cure it in two hours. The first half hour is occupied in rubbing the patient over the whole body with brown soap; he is subsequently placed in a bath, and frictions are employed over the entire surface, for the space of an hour, in order to soften the epidermis and to penetrate the wrinkles and folds of the integuments; the last half hour is devoted to frictions with the ointment of Helmerich* upon the whole of the cutaneous surface. The patient is cured after this application, which destroys the *acarus*.

Dr. Delatte, regimental surgeon, obtained similar results from M. Hardy's method, and wrote to M. Vleminckx that, in consequence of its employment, soldiers were only detained in the hospitals during the time requisite for disinfecting their clothing, that is to say for three or four days.

The same success attended the experiments instituted in several penitentiary establishments, and proved the incontestable superiority of M. Hardy's method. Accordingly, M. Vleminckx felt himself justified in giving instructions for the modification of the treatment of the itch in all of the sanitary institutions of Belgium. Only a single impediment presented itself: the disinfection of the clothing and bed-furniture. It was very pleasant, certainly, to cure patients in two hours; but what was the use of such a rapid cure, if it was necessary to detain them in hospitals for three or four days whilst their garments were disinfected.

M. Vleminckx was about to direct experiments in regard to the period during which it was absolutely indispensable that infected objects should be subjected to the action of chlorine, when chance intervened and solved his problem.

About three months ago, he received, from the Belgian minister of justice, a request that he would give his opinion in regard to an apparatus designed for the destruction of vermin. This apparatus, proposed by the administrative committee of the prisons of Antwerp, consisted of an iron chest mounted upon a simple furnace. One of the members of this committee, M. Lechelle, had observed the employment of heat for the destruction of vermin in a sanitary establishment in Switzerland, and it was at his suggestion that this chest had been constructed. In an experiment at which M. Vleminckx was present, various articles filled with vermin, belonging to a prisoner who had entered on the previous evening, were suspended in the chest; a thermometer was placed in it also. In twenty-five minutes the thermometer indicating 210° F., the clothing was carefully examined with a lens. It was evident that the parasites *and their eggs* were deprived of vitality, whilst the clothing itself was uninjured. This last point is very im-

* This ointment consists of:—Sublimed sulphur, 2 parts; sub-carbonate of potash, 1 part; lard, 8 parts. Dissolve the carbonate of potash in a little water and mix.

This ointment is employed exclusively at the Hospital St. Louis. BOURCHARDAT. *Formulaire magistral*, p. 399.

portant, for it dispenses with the necessity of immersing articles of dress in boiling water, which is likely to make them shrink and tear.

M. Vleminckx believes that acari and their eggs may be destroyed as rapidly as vermin. The temperature of the chest can be elevated to over 210°. Linen, cotton, and starch can support a temperature of 300° F. The manufactory of wool requires high temperatures.

The problem, then, appears to be solved, and, thanks to the iron chest, we may hereafter dispense with disinfecting wards.

All persons suffering from the itch, will hereafter be subjected to the "two-hours treatment," and their clothing will be placed at the same time in the insecticide apparatus. Patients can then leave the hospital as soon as the treatment is completed.—*Journal des Connaissances Médico-Chirurgicales*. August 15th.

8. *On the Spontaneous Cure of Perforations of the Lung of Tuberculous Origin.*

[At the meeting of August 24th, of the *Société Médicale des Hôpitaux de Paris*, over which Professor Requin presides, M. Valleix read the following report.]

M. Woillez has presented you with a paper in support of his application for associate membership of this society. The interest of the subject and the merit of the memoir, render the task of reporting upon it, which you have confided to me, an agreeable and easy one.

M. Woillez has observed at Hôtel-Dieu, among the patients of M. Louis, two cases of manifest pulmonary perforation, in which, when death occurred in consequence of the progress of the phthisis, he discovered a complete obliteration of the fistulæ, and consequently, the cure of a formidable accident, which alone threatened to destroy the patient's life. These cases aroused his attention; he made researches which enabled him to group together a number of similar recoveries, and it was with these elements that he composed the essay which he has submitted to your consideration.

If we received the opinions advanced in the interesting thesis of Saussier, we would consider the perforation of the lung from which hydrothorax results, an invariably mortal lesion. But, upon examining the facts, we find that in a number of cases, carefully observed, cicatrization or rather obliteration of the fistula has occurred in various ways.

M. Woillez first reports two cases, which, from the precision of their details, leave not the slightest doubt on this point. The patient, in the course of phthisis, suddenly experienced all the symptoms of perforation: very acute and sudden pain in the right side; extreme dyspnoea; painful cough. These symptoms remained stationary for three months, until the patient entered the hospital. Then, there was discovered, a tympanitic sound of the right side, except at the base, where dullness was complete; amphoric respiration; amphoric resonance of voice and cough; and the splashing sound of succussion, which the patient produced himself by a sudden movement. Evidently, this was

hydro-pneumothorax. At the end of three months, these signs had disappeared, except the splashing sound.

During the five months through which the patient survived, this last sound continued alone. Then, tubercular meningitis supervened, and death.

At the autopsy, the fistula was found to be completely obliterated by a tough false-membrane, which adhered closely to the two layers of the pleura.

We have entered into the details of this case, to show how observation during life and after death demonstrated the perforation and its cure. The other cases being nearly similar, it will suffice to notice their peculiarities.

M. Woillez reviews :

1. A case of Laennec, in which a firm false-membrane, an inch in length, united the two layers of the pleura, and obliterated the fistula.

2. An observation of M. Beau, encountered in the service of M. Bricheteau, at the Hospital Necker, in which the obliteration of the fistula was perfectly established, there remaining, of all the symptoms, only a metallic resonance of the cough and of the voice.

3. A case reported by Dr. Chalmers, in which all the symptoms disappeared ; but, in this instance, thoracentesis was practiced.

4. Another case, cited by Dr. Culmann, is remarkable for the persistency of the amphoric respiration and voice.

5. In a case reported by Dr. Goupil, which came under the observation of M. Woillez also, only the sound of thoracic succussion was observed ; but the autopsy revealed a cicatrized fistula, and we must admit with the author, that the patient had perforation of the lung and that the fistula was obliterated rapidly, and before he came under medical observation.

6. Lastly, a case derived from the *Bulletin of the Medical Society of Poitiers*. No autopsy was made, and, notwithstanding all the reasons that render it probable that this was an instance of spontaneous cure of a pulmonary perforation, it may be omitted in the examination of the principal questions which we have to discuss.

We see, in the first place, that in all the cases which have been carefully studied, the sound of thoracic succussion persisted, except in the instance in which *paracentesis thoracis* was practiced. The same thing was noticed in a case which I observed in May last, at *La Pitié*, to which I shall refer presently. This fact is naturally explained by the persistence of a certain quantity of air in the pleural cavity, and it is easily understood how thoracentesis, by evacuating the air and liquid, should cause this phenomenon to disappear.

The persistence of the amphoric respiration and voice, which was noticed in the cases of Drs. Beau and Culmann appears at first to be more difficult of interpretation. But it is perfectly explicable by the theory of Professor Skoda, who regards these sounds as being only a consonance of those produced in the lungs and larynx. This is the explanation adopted by M. Culmann. Still, we must enquire with M. Woillez,

why, if this is the fact, these phenomena have disappeared in many precisely similar cases. It appears to me that this diversity of results can only be attributed to peculiar dispositions of parts;—it is quite credible that when the air enters largely into the bronchi, and especially into those adjacent to superficial cavities, if the lung is still distended by a certain quantity of air, this consonance may easily occur, whilst in other cases this would be difficult or even impossible. I think that Dr. Culmann has done wrong in generalizing an explanation applicable only to particular cases.

Passing now to pathological anatomy, we find with M. Woillez, that obliteration may be effected in three principal modes.

1. The perforation frequently occurring in the upper lobe, this may be maintained in apposition with the costal pleura by old adhesions. The little opening is speedily covered by false-membrane, and the fistula is obliterated. Subsequently, when the lung collapses, the false-membrane is elongated and forms a bridle, as occurred in the case of Laennec (*See Case I.*), and in one which I have observed. This case was, in a few words, as follows:—

M. Valleix's Case. A young man, who had presented signs of phthisis for three months, suddenly experienced the symptoms of pulmonary perforation that have already been described. Four days after, (March 28th, 1853) he entered La Pitié (St. Raffael's Ward). We found on the left side, tympanitis, amphoric souffle, and metallic tinkling. The sound of the thoracic succussion was not manifested until nine days afterwards, and then the inferior portion of the chest, previously sonorous, became dull. A month elapsed, and the metallic tinkling was gone, the voice and cough preserved their amphoric character. In the course of another month, there was no longer any amphoric sound. Death occurred on the 11th of June, the patient, during the last three weeks, presenting only the sound of fluctuation.

At the autopsy, we found the lung pushed back pushed upwards and back towards the vertebral column. It was covered by a very thick false-membrane. Behind, about the juncture of the upper with the middle third of the lung, there were three very strong bridles, nearly an inch in length; one of them, about quarter of an inch in thickness, completely obliterated by its pulmonary end a rounded orifice communicating with a cavity of the size of a large hen's egg.

In this case we find the obliteration of the fistula causing, in the first place, the cessation of the metallic tinkling, whilst the amphoric sounds continued, because the lung was not then completely compressed and deprived of air, and consonance was possible. Subsequently complete compression occurred and the amphoric murmurs disappeared.

2. Another condition which favours the obliteration of the fistula, is the compression of the lung; because, if the fistula is towards the vertebral column, the edges of the pleura are thus brought in apposition,

and a false-membrane is easily formed, as in a case reported by M. Woillez.

3. Lastly, the liquid effusion accumulating until it reaches the level of the fistula, may cause fibrinous deposit which obstructs the orifice, and, when the liquid is absorbed, it may leave a free or valvular false-membrane, or the latter may form adhesions with the costal pleura.

Such are the very important facts cited by M. Woillez, and the deductions which flow from them. I could extract many other interesting pathological details, but what I have already mentioned will suffice to give an idea of the objects of this essay. I cannot however omit mentioning a therapeutical deduction that the author has drawn from a study of his cases. In consequence of the mode of cicatrization of perforations, and especially in view of Dr. Chalmers' case, he concludes that it is proper to employ thoracentesis and iodine injections. We agree with him that these combined methods may be attempted; but more extended experience will teach us their true value.—*Gazette des Hôpitaux*, No. 115.

9. *On Yellow Fever.* By M. DUTROULAU, Physician-in-chief of the Colonial Service of the French Marine.

[M. Dutroulau concludes a long memoir upon the specific nature of yellow fever, by the following propositions.]

I. There have always been physicians desirous of confounding the cause of yellow fever with that of marsh fever, and who have regarded the first of these diseases as simply an exaggeration of the common bilious and pernicious fevers of hot climates. These ideas have never prevailed.

In our day, more exact and profound investigation of infectious diseases and of the share of marsh miasm in the production of the majority of them, has brought back many to the opinion that yellow fever is of malarious origin. This opinion has no better foundation now than formerly.

II. Experience teaches: 1. That yellow fever does not first make its appearance or rage with the greatest intensity in localities in which malarious emanations are most prevalent; 2. That the epidemics or sporadic cases of yellow fever do not uniformly appear at those periods in which malarious fevers prevail with the greatest intensity; 3. That the existence of yellow fever is limited to a certain propinquity to the sea-board, whilst paludian fevers are encountered wherever there are miasmatic exhalations, without any exception as to geographical position. This authorizes us to conclude that the miasm of yellow fever derives some of its essential characteristics from the influence of the sea.

III. In accordance with the knowledge which we possess of the special action of each of the miasms the composition of which is known to us, we are forced to admit the specific character of natural miasms, the nature of which we know only from the pathological effects which they produce. The greater number of the endemic diseases of hot

countries are of miasmatic origin, and they differ too greatly from one another in their seat and nature, not to force us to acknowledge that the miasms which produce them possess equally different characteristics. The specific nature of miasms appears then to be a well established point in etiology.

IV. Marsh miasm, the sources of which are so varied and numerous, and the action of which is revealed by fevers curable by quinine, is very prevalent in hot countries. A constant and elevated temperature, excessive humidity and electricity, luxuriant vegetation, a soil covered by myriads of insects; these are the elements which explain its formation and diffusion. It is not astonishing that its influence should be felt in the production or in the course of all endemics, and that it should be added to the specific element which characterizes them, sometimes as a simple complication and secondary element, sometimes as a principal element absorbing or masking the specific one. Thus are explained the remittent attacks which occur at the onset or in the course of dysentery, of hepatitis, of yellow fever, but not oftener in these than in other diseases.

V. The specific character of the paludian miasm should be limited to those fevers curable by quinine, and it would be profitable, so far as therapeutics are concerned, to seek what remedies may be as efficaciously opposed to the specific miasmata which produce other endemics or epidemics, the yellow fever especially, rather than to attempt to confound under the same denomination various affections, the specific treatment of which should be different.

VI. The symptoms of pernicious fevers and of yellow fever are still more distinct than their causes. The first are so numerous and varied in type, in form, in aspect, that it may be said that they have nothing in common except their origin, and that they no more resemble each other than they resemble any variety of yellow fever. This dissimilarity is not established by comparing the two diseases symptom by symptom, but rather by comparing the general phenomena of each type of pernicious fever with the pure form of yellow fever. The totality of the symptoms of this latter disease, their order of succession, and the peculiar characters which they present according to periods, make of it a specific disorder which should not be confounded with any other.

VII. If it were necessary to add to all these differential characteristics, pathological anatomy and treatment would also furnish their contingent. Pernicious fevers give rise to no constant and characteristic lesion; the black vomit and the hæmorrhages of all sorts, the icterus and the peculiar state of the liver, are only seen together in yellow fever. Nothing is more certain, nothing, considering the gravity of the symptoms, is more frequently efficacious, than the treatment of pernicious fevers; nothing is more uncertain, nothing is followed by more opposite effects than the numerous systems of treatment adopted in yellow fever. It may be said, that pernicious fevers have their specific; that of yellow fever is yet to be found.

VIII. If yellow fever presents varieties, they are not connected with

the existence of specific symptoms, but with the predominance of such or such a symptom, and with its progress; and, at the period of intensity of all epidemics of any duration, the characteristics of the typical form of yellow fever are observed. It is when the epidemic occurs in the fever season, or still more commonly in isolated or sporadic cases that these varieties are observed. They are due to the malarious complication, and it is only from this cause that yellow fever has been confounded with marsh fevers.

IX. The malarious complication of yellow fever is always unfortunate, because it impresses the disease at its onset with a deceptive physiognomy, which renders the treatment uncertain and the issue frequently fatal. In the mild periods of epidemics, when it becomes the principal disease, and readily yields to sulphate of quinia, we must not attribute the cure of the yellow fever to this medicine, for it is cured by the simplest remedies.—*Archives générales de Médecine*.

OBSTETRICS, &c.

10. *Case of Dystocia.* By M. CAZEAUX.

Several weeks ago, I was called to a woman, who had been under my care for a miscarriage, eighteen months previously. At that time, I observed nothing unusual in the conformation of her organs of generation. I found the patient at the full term of parturition in all probability, without pain, without uterine contractions; the membranes, however, had ruptured on the preceding day, and there had been occasional discharges of liquid since.

Seeing no occasion for interference, I made no examination, and waited for four days, without the supervention of the slightest change. Commencing then to be concerned at such prolonged inertia, I examined the patient in an erect posture, and found the whole vagina occupied by a voluminous mass, which gave the impression to the finger of slight density. After protracted efforts the cervix was reached; it was deformed, elongated, greatly deviated upwards and towards the left behind the branch of the pubes. Apprehending great difficulties, being doubtful in my diagnosis (of a tumour developed in the substance of the posterior lip), I sought the advice of Professor Dubois; the consultation was held on the following day; no new manifestations had occurred; after an attentive examination, M. Dubois believed that he recognized a cyst developed in the posterior lip of the cervix. We agreed that it was proper to wait for the pains, and, if the tumour offered an obstacle to delivery, it should be evacuated by a puncture. The next day labour came on: it was evident that it could not terminate happily. A trocar was plunged into the tumour. The facility with which the instrument could be moved laterally, left doubt as to its penetration into a cavity; nevertheless there was no

discharge from the canula. M. Danyau was summoned in the absence of Dubois, and pronounced in favour of the existence of a cyst; two more punctures were practiced with the same results. Two ineffectual attempts to apply the forceps were successively made. The child was dead. I endeavoured to apply the cephalotribe, but without success. Delivery was finally accomplished by version, but the woman was exhausted; she had lost a large amount of blood, and she succumbed. At the autopsy, it was found that in reality there was no cyst, but an hypertrophy of one of the lips of the neck of the womb, gradually and insensibly confounding itself with the body. This lip, notwithstanding the position of the cervix, was the anterior one. The tumour, of the size of two fists, enclosed empty cavities. If the diagnosis had been positive, notwithstanding my repugnance to the Cæsarion section, I should not hesitate to perform it. Perhaps in such a case as this, in which the life of the mother is so gravely compromised, it is our duty to attempt to save that one of two beings, who has manifestly the greatest chance of surviving.

There was no encephaloid disease; only the hypertrophied uterine tissue. (*Revue Médicale*. Sept. 30th.)

11. *Leucorrhœa of the Vaginal Portion of the Uterus as a Cause of Sterility*. By Professor SIGMUND, of Vienna.

The affection vulgarly designated *the whites* has often been signalized as a cause of barrenness, but numerous observations have shown that leucorrhœa when it proceeds from the external genitals, the urethra, and the vagina, is no obstacle to fecundation. On the contrary the leucorrhœa which affects the portion of the uterus inserted into the vagina, which is accompanied by tumefaction of cervix, is a real hindrance to impregnation.

The author has observed many cases entering into this latter category.

CASE. Madam F., 23 years, of good constitution, married for three years and a half, was attacked, three months after her marriage, with a leucorrhœa which resisted local and general treatment. An obstetrical examination discovered a vaginal blennorrhœa; the mucus membrane of the vagina was pale; the cervix was red, tumefied, and prominent; the uterine orifice was obstructed by viscous matter; menstruation was normal. The husband of this lady was robust; he lived on good terms with his wife, and had given proofs of his virility.

The treatment consisted of injections of cold water, of superficial cauterization three times a week of the cavity and circumference of the cervix with the sulphate of copper, of baths and an animal diet with a little wine, and exercise in the open air. Abstinence from coitus was advised.

The blennorrhœa was cured at the end five of months.

A month afterwards this lady became pregnant. She was delivered of a little girl, and two years afterwards of a boy.

The author has observed six analogous cases treated and cured in the same way. He does not pretend that whatever there is a coincidence between sterility and leucorrhœa of the uterine neck, the cure

of the latter affection will render coition effectual; but he rightly insists upon the necessity of an attentive examination of the reproductive organs and upon an appropriate local treatment, because it is evident that leucorrhœa of the cavity of the cervix is a real obstacle to impregnation. He also mentions that in all the cases reported by him the blennorrhœa was purely local, independent of any other affection, a circumstance necessary to the success of the treatment.—*Weiner Medizinische Wochenschrift*. (*Gazette Médicale de Paris*.)

SURGICAL PATHOLOGY AND THERAPEUTICS.

12. *Case of Strangulated Inguinal Hernia successfully treated by the Cold Douche.* By EDWARD WARREN, M. D., of Edenton, N. C.

On the 20th of November, I was sent for in haste to visit George, a negro, aged about 40 years, who had been suffering for several hours with strangulated inguinal hernia.

I resorted to all the usual expedients for relaxing the constriction and returning the intestine, but entirely failed to produce any diminution in the size of the tumour.

Before resorting to an operation, a remedy suggested itself to my mind, with which I was fortunately perfectly successful.

Stripping the patient, and putting him in the most convenient position for taxis, I procured from a stream near the house a pail of very cold water, and without giving the least warning, poured a considerable portion from the height of several feet immediately upon the tumour and point of contraction.

The result surpassed my most sanguine expectations. The patient was violently convulsed for a moment, the constriction then relaxed at once, the intestine was returned, and an operation avoided.—*Am. Jour. of Medical Sciences*.

13. *On Scapulalgia.* By M. MALGAIGNE.

When we reflect upon the numerous works which have been written upon the diseases of the joints, we are astonished that so little attention has been bestowed upon an affection which is, perhaps, one of the most common with which I am acquainted, I mean that disease of the scapulo-humeral articulation which is known in Germany by the strange name of *omarthrocacis*; and which I first called *scapulalgia*, a name which is less harsh, and which accords with the terms *coxalgia* and *arthralgia* already employed in science.

I do not intend here to supply completely the void which I have mentioned; I wish to speak particularly of three affections which have always been the sources of embarrassment to surgeons. I shall speak: of the incomplete luxations of the humerus of Sir Astley Cooper; of

the luxation upwards and forwards of M. Laugier; and, lastly, of the displacement of the tendon of the long portion of the biceps. These three so-called traumatic affections, which are omitted in even the modern treatises on surgery, are related, in my opinion, to scapulalgia, of which they are only the epiphenomena.

Scapulalgia, which those who frequent the Hospital St. Louis have often observed, is an exceedingly common disease; more common, in fact, in adults and in the aged, than coxalgia itself; like the fractures of the neck of the humerus, which are more frequent than those of the neck of the femur, even in extreme old age.

This affection presents itself under three principal forms: Sometimes there are all the symptoms of dry arthritis. If, as occasionally happens, there is slight effusion in the articulation, it cannot be detected; there is no ballottement of the head of the bone. The pain has its seat of predilection on the front of the shoulder. There is no displacement, no symptom of semi-luxation. I shall say no more of this first variety of scapulalgia: I treat it by complete rest of the shoulder.

In other cases, there is considerable hydrarthrosis; the capsule is dilated, and the head of the bone forced outwards; the articular surfaces are separated by the liquid. Here the muscles of the shoulder influence the displacement, and as those which move the arm forwards are more numerous and energetic than those which move it backwards, it results that the head of the humerus, already forced outwards by the effusion, is drawn slightly forwards also. The external configuration of the shoulder is modified; it is more rounded. The head of the humerus forms a prominence against the external border of the coracoid process, and is maintained there by the liquid and by the muscles. By placing the finger under the acromion apophysis, a more or less considerable depression may be detected. There is an incomplete luxation, which is reduced by the slightest pressure, and which is reproduced, with the same facility.

This is what Sir Astley Cooper had seen when he wrote his chapter on partial dislocations of the humerus.

He said:

“I believe this is not a very rare accident, and shows itself by the following marks;—

The head of the bone is drawn forwards against the coracoid process; there is a depression opposite the back of the shoulder-joint, and the posterior half of the glenoid cavity is perceptible from the advance of the head of the bone, the axis of the arm is thrown inwards and forwards; the under motions of the limb are still capable of being performed; but its elevation is prevented by the head of the humerus striking against the coracoid process; there is an evident protuberance formed by the head of the bone in its new situation, which is felt readily to roll when the arm is rotated. Reduction is easily obtained but the displacement returns readily.”
Cooper on Fractures. Am. ed., p. 319.

This description closely resembles that which I have given of scapulalgia.

This then was a very simple description of a very common luxation:

why was it that it was not understood? Why was it that I myself did not comprehend for twenty years what the English surgeon wished to explain? We were all deceived for two reasons: the first was, that Cooper announced his luxation as a traumatic luxation; whereas it is always a pathological luxation, a phenomenon of scapulalgia, which disease was not then understood; the second reason was that of the three cases which Cooper cited in support of his description, there were two which did not agree with it; one, that of Bachelor, was a luxation under the coracoid, which it is just possible was a partial one; another, which was detected in the dead subject, and reported by Mr. Patey, was a complete luxation under the coracoid. As to the third, the only one which agrees with Sir Astley Cooper's description, something must have misled the great surgeon. His patient, fifty years of age, fell upon his shoulder; effusion took place in the articulation; and when Cooper arrived, the head of the humerus was projected forwards and inwards against the coracoid process. He called that a traumatic luxation.

In my opinion, traumatism only produced inflammation; the effusion dilated the capsule without tearing it, and forced the head of the bone forwards. I have often observed these slight displacements of the head of the humerus, originating in a blow, a fall, or a violent muscular contraction.

It is plain why these sub-luxations are reduced so easily, and why they are reproduced with such facility. It is just what occurs in hydrarthroses of the knee, which dislocate the patella; press the patella, and it slips into its place; remove the pressure, and the displacement reappears. Cooper says that the luxation must be reduced, and the shoulders kept at rest by a clavicle bandage or else the displacement will return. This is doing too much and yet not enough. It is too much, because the slightest pressure or position alone suffices to obtain reduction; it is not enough, because, reduction being effected, it is necessary to treat the primary affection, the scapulalgia, the hydrarthrosis, for which immobility is not sufficient in all cases.

When an articulation becomes diseased, the ligaments and muscles retract. Every one is aware of the varied phenomena of muscular contraction in white swellings of the knee. The same phenomena occur in the shoulder, only the contractions are less frequent. When, after an acute arthritis of the shoulder the liquid is absorbed, there remains an internal arthritis, a white swelling. Then, occasionally, certain muscles become atrophied; the arm is carried slightly backwards, and hangs by the side of the body. No one, that I know of, has alluded to this variety of sub-luxations. In other cases, the muscles contract and then many varieties may occur.

There are cases in which the contraction is chiefly manifest in the elevator, supra-spinatus muscles, the deltoid, etc., which draw the head of the humerus upwards with the greater facility, inasmuch as the laxity of the capsule removes an obstacle to this movement. There is a prominence under the acromio-coracoidian ligament which is pressed upwards, and a corresponding hollow at the posterior portion of the

shoulder. The liquids being absorbed, false membranes sometimes form; adhesions occur between the articulating surfaces, and the pathological process remaining thus, the sub-luxation is reduced with difficulty. All these facts escaped Sir Astley Cooper; M. Laugier observed one case, and described it as a traumatic luxation of the humerus. A man suffered pain from a violent rotation of the arm, and subsequently inflammation arose; the scapulalgia progressed; the head of the humerus was forced outwards and forwards, the arm was shortened. We do not see in this, any more than in Cooper's cases, traumatic luxation; it was simply scapulalgia.

Some time since a woman came to consult me who had been treated three months previously for a fracture of the scapula; she had fallen upon the posterior portion of the shoulder, and the articulation had suffered somewhat from the *contre-coup*. So, when the patient left the wards, perfectly cured of her fracture, she still had some pain in the joint; and when I saw her sometime afterwards, she said that she had constantly suffered. The shoulder was slightly swollen; at its anterior part was the head of the humerus forced forwards and upwards, under acromio-coracoidian ligament, leaving a slight hollow behind. By pressing on this tumour, considerable pain was produced, but its reduction was not effected. Mensuration showed that there was slight shortening. This was certainly M. Laugier's luxation; but our scapulalgia. What should be done in a case of this sort? Should we act as M. Laugier recommends, and effect reduction? No. We should attempt to make the head moveable, we should impress movements upon the arm, taking care not to commence these movements until the inflammation of the joint has subsided, otherwise the disease may be re-induced. It will be time to act when pressure on the shoulder, especially on its anterior aspect, no longer developes pain. The pain in scapulalgia always lingers about the front of the shoulder. As long as pressure causes pain, wait; prescribe rest and cataplasms.

There is another affection, which has been regarded as a traumatic lesion, which is not treated of in books, but which is the cause of as much embarrassment to surgeons as those of which I have spoken: I refer to what is called luxation of the tendon of the long portion of the biceps.

Duverney has said: It sometimes happens that, in consequence of a sudden abnormal movement, muscles are displaced or luxated; acute pain follows, and an impediment to motion; a pain and impediment which only cease when the muscle, by proper manipulation, is restored to its normal position.

Since Duverney, many surgeons have thought that they have observed luxations of the long head of the biceps, and have described this accident as a traumatic affection, which might occur independently of any other affection. Certainly it is not impossible that this tendon may be dislodged from its groove in certain luxations and fractures, whether traumatic or spontaneous; but in these cases, it is not a simple traumatic lesion, but an epiphenomenon of the affection of the

joint. It will be seen, upon an examination of cases, that an isolated luxation of this tendon has never been observed; that there has always been a disease—scapulalgia, in which it originated.

Towards the close of the seventeenth century, William Cooper reported, as an extraordinary case, the history of a laundress, who, in wringing out clothes, suddenly experienced violent pain in the shoulder. This anatomical surgeon saw her three days afterwards, having found a depression upon the external face of the deltoid, tension of the biceps, and inability to extend the arm completely, concluded that there was displacement of the tendon of the biceps. He rotated the arm in different ways, the tendon returned to its place, he says, and the pain almost immediately subsided, and the patient recovered the use of her arm. He mentions farther on, that the shoulder was slightly inflamed, and that the patient had not used her arm for some time past. Without speaking of the diagnosis, which was hardly warrantable, this fact presents only the history of scapulalgia.

Chopart observed on the anterior surface of the shoulder of a soldier, who had fallen on that part, a slight prominence, which appears to have puzzled him. He pressed upon this swelling, it disappeared, and the symptoms subsided. *He thought that this was probably a luxation of the tendon of the biceps!* I consider it a partial luxation depending upon slight hydrarthrosis.

In 1844, Dr. Saden published a memoir upon this pretended dislocation of the bicipital tendon. In his first case, he described a scapulalgia, which he entirely misunderstood, both during the life of the patient and at the autopsy. It referred to a man who had fallen upon the elbow, and subsequently suffered from acute inflammation of the shoulder. Three weeks afterwards the swelling had disappeared, but the pain continued. The head of the humerus projected forwards under the acromion. Motion, especially in abduction, was difficult, and was accompanied by rough friction of the prominences of bone. At the autopsy, Dr. Saden found extensive inflammation of the joint; the long head was out of its groove, resting on the small tuberosity of the humerus. He calls this a traumatic dislocation of the biceps. It was a simple scapulalgia. As to his only other case, Dr. Saden describes it as a luxation accompanied by a dislocation of the biceps. Here there was no autopsy to verify the diagnosis.

In conclusion, these three so-called traumatic affections, are simply pathological sub-luxations due to scapulalgia. The first, described by Sir Astley Cooper, is scapulalgia with hydrarthrosis; the head of the bone is projected forwards; the tumour is reducible, but readily returns; no other treatment than that of hydrarthrosis.

The second, which M. Laugier mentions, is adhesive scapulalgia; the head is carried forwards and upwards under the acromio-coracoidian ligament; the tumour is irreducible; the limb must be moved, but not until inflammation has subsided.

As to the luxation of the long head of the biceps, it is only an epiphenomenon of scapulalgia, which merits no attention.—*L'Union Médicale*, Sept. 22d.

THERAPEUTICAL RECORD.

Aphonia.—Dr. Stevens, of Ohio, reports (*Western Lancet*, August,) a case of aphonia of twenty months standing relieved by iodine inhalations. It will be recollected that Prof. Pancoast has recorded, in the volume of transactions for 1850 of the American Medical Association, two instances in which he cured aphonia without structural alteration, by inhalations of dilute chlorine vapour.

Apnœa.—M. Ripault has submitted to the judgment of the French Academy of Sciences, a note upon the therapeutical advantages of *pulmonary insufflation* in the paroxysms of apnœa which supervene in pneumonia in infants. He cites the case of a child, twenty-six days old, with pneumonia of the right side, who was repeatedly re-animated by insufflating the lungs, when apparently at the point of death; and does not doubt that by the employment of this method many patients might be saved who would otherwise die asphyxiated.—*Comptes-rendus de l'Académie des Sciences*. T. xxxvii., p. 302.

Gangrene—of the Lung.—Professor Skoda reports (*Zeitschrift der k. k. Gessellschaft der Aerzte zu Wien*, May 1853,) four cases of gangrene of the lung, treated by inhalations of the vapour of spirits of turpentine, of which three recovered. Dr. Skoda has great confidence in this remedy, and reported last year one case in which it was successfully employed.—*Arch. gén. de Med.*

Hydrophobia.—Dr. Chairètés, inspector of the Royal Botanic Gardens at Athens, in a communication to the *London Lancet*, strongly insists upon the remedial virtues of *asparagus officinalis* in this terrible disease, and hopes that when others have tested the efficacy of this medicine, no government or society will attempt to deprive him of the credit of this discovery!

Paralysis of the Bladder.—Dr. Pavessi reports in the *Gazzetta Medica Lombarda*, the case of a man of nearly 70 years, subject to attacks of gout, who, after nocturnal exposure to cold, was seized with pain in the extremity of the spinal cord and strangury. These symptoms disappeared under proper treatment, but paralysis of the bladder remained. Electricity was used without benefit. The bladder was then daily washed out with an infusion of mallows, and a solution of nicotin (12 grains to an ounce of water, with a little gum,) was injected. In fifteen days the bladder contracted well, and the urine was voided in a full stream.—*Med. Times and Gazette*.

Pertussis.—Trousseau defines this disease as “a specific and infectious bronchitis,” and recommends that it should be treated by emetics of sulphate of copper, and afterwards by the powdered root of belladonna.

Pharyngitis.—Dr. Merrill, of Tennessee, recommends (*Boston Med. and Surg. Jour.*, Nov. 16th,) the topical use of iodine in this disease; but does not discriminate the cases in which it is peculiarly applicable, or adduce cases in support of its efficacy.

Phthisis.—M. Trousseau has revived a method of treatment proposed by Dioscorides, viz.: *arsenical inhalations*. Cigarettes are prepared of paper which has been moistened by a solution of arsenite of potash and dried. These are smoked once or twice a day for a fortnight. The vapour produces some irritation. M. Trousseau states that this plan diminishes the bronchial catarrh, but has no effect upon the deposit of tubercles.—*Med. Chir. Rev.*

Prolapsus Uteri.—Dr. Seyfert, with a view of substituting a supportable affection for another which is unendurable, proposes (*Vierteljahrschrift für die praktische Heilkunde*, Ester Band, 1853,) to induce retroflexion of the womb in serious cases of prolapsus, by the persevering use of the uterine sound. He cites three cases in support of this practice. As Dr. Seyfert exaggerates, perhaps, the dangers of prolapsus, and also the innocuity of retroflexions, it will be well, before adopting his ideas, to await new facts in confirmation of them.—*Arch. gen. de Med.*

Syphilis.—M. Ed. Robin announces to the Institute of France, that the bichromate of potash, which he has recommended as antisypilitic, and which has been successfully employed in France by M. Vincent, had been used with equal success at Erlangen (Bavaria) by Professor Heyfelder.—*Comptes-rendus de l'Académie des Sciences*, Sept. 19th.

Tetanus.—Dr. Poitevin, of Mobile, Ala., reports in a French Medical Journal, a case of well characterized traumatic tetanus successfully treated by large doses of tartar-emetic.

Dr. Carpenter, of Long Island, reports (*N. Y. Med. Times*) two cases of traumatic tetanus, in which applications of ice to the head and spine were followed by recovery. It is difficult to decide from the author's account to what extent these recoveries were referable to the ice; opiates, mercurials and assafoetida injections having been freely employed.

Trismus Nascentium.—Dr. Gaillard, of Charleston, S. C., reports (*Charleston Med. Journal*, Nov. 1853,) two cases of this formidable disease, in which recovery took place under the employment of the tincture of Indian hemp, (*Cannabis Indica*.)

EDITORIAL AND MISCELLANEOUS.

Our readers will learn with pleasure that Dr. JAMES B. McCaw, of Richmond, will henceforward be associated with the present editor in the conduct of this Journal.

Whilst it is hoped that by this arrangement the general effectiveness of the work will be increased, no change either in its plan or objects is contemplated. It will still be its prominent aim to elicit the views of Virginia physicians, to propagate a spirit of rigorous scientific enquiry and careful observation among the medical men of the State, to contribute, in fact, to the formation of a *home medical literature*. It will still glean in the great field of foreign periodical medicine, and will attempt to furnish a concise and comprehensive record of the progress of medical science; not, as is too much the habit of even the best American journals, by mere reprints from English periodicals, but by careful abstracts and digests prepared from original sources. Lastly, it will continue its advocacy of useful reform, and its unflinching support of the interests of the Medical Profession in Virginia.

In concluding this notice, we may be permitted to state that the present condition of the Journal is sufficiently prosperous to ensure its continuance. Without much effort on the part of its publishers to bring it into notice, unconnected with any School, or Publishing House, or other medium of popularity, it has nevertheless steadily progressed in the favour of the profession. We are sincerely grateful for this kind support and encouragement, which we receive rather as a premium for future industry than as a reward for past services.

Secret Remedies.

At the last meeting of the American Medical Association, Dr. Parker, of Richmond, offered a resolution in regard to the propriety of urging Congress to pass a law, requiring the inventors of patent medicines to make public the composition of their remedies, and insisted upon the advantages of such an act in a manner highly creditable to

him. This proposition, however, shared the fate of every other measure of reform which was brought before that disinterested body ; and, if we recollect aright, its defeat was mainly due to the opposition of Dr. Jackson, of Boston, a gentleman who, having once lost the opportunity of becoming famous by his tardiness in promulgating the discovery of etherization, naturally felt sympathy for those discoverers (!) of new remedies who monopolize them to their profit, or exact an indemnity from society.

We are not credulous enough to believe that any *immediate* good can result from waging war against that prodigious system of charlatanism and bare-faced impudence which consists in the manufacture and sale of quack medicines :—

“It gives me much despair, said Sir Richard Steele, 140 years ago, it gives me much despair in the design of reforming the world by my speculations, when I find there always arise, from one generation to another, successive cheats and bubbles, as naturally as beasts of prey, and those that are to be their food. There is hardly a man in the world, one would think, so ignorant, as not to know that the ordinary quack-doctors who publish their great abilities on little brown billets, distributed to all who pass by, are to a man impostors and murderers ; yet such is the credulity of the vulgar, and the impudence of those professors, that the affair still goes on, and new promises, of what was never done before, are made every day. What aggravates the jest is, that even this promise has been made as long as the memory of man can trace it, yet nothing performed, and yet still prevails.”

The evil then is deep-rooted. It springs from the cause that Faraday lamented, when, in dealing a death-blow to “table turning,” he expressed his disgust for the propagators of this delusion, indeed, but his deeper disgust for those systems of education which made such a delusion possible.

Still, however distant the prospect of amendment, we think that it behoves the medical journalist to refer from time to time to this and kindred topics, to call attention to the evil, and to express his righteous hatred of the falsehood of those guilty men who deem that profit justifies iniquity, and spend their lives in practising upon the credulity and ignorance of mankind.

It is the plain law, from which there is no appeal, that a man practising any branch of medicine, who makes a discovery useful to mankind, is morally guilty if he conceals it. If the discovery furnishes the means of neutralizing any of the great scourges which prey upon

humanity, the recompense cannot be too splendid. Such have been the introduction of bark and mercury into medicine, the discovery of etherization, the discovery of Jenner, the discovery by Coindet of the therapeutic effects of iodine. In such cases governments should reward the author nobly, both in honour and fortune. But the discoverer, if he is honest, cannot wait until he is assured of his recompense.

It is only in such cases as these, in which the necessities of the discoverer seem to entitle him to demand indemnity for the benefit he confers, that the advocates of secrecy in remedies, have room for an argument. As to the wretched inventors of nostrums, they deserve no protection, but on the contrary, it is the duty of legislators to restrain them from imposing a tribute upon credulity and from causing fatal accidents.

There is one painful subject to which we must allude before terminating these brief reflections. We have been informed by most respectable authority, that large quantities of these patent medicines are annually sold to reputable physicians in our State. We would fain believe that there were no members of our profession so forgetful of the dignity of their calling as to truckle to the prejudices of their patients by prescribing these remedies, or so ignorant of the resources of their art as to be induced to administer them, but we must credit the information we have received. "What can we think, says Pelletan, in his *Clinique Chirurgicale*, of those physicians who place themselves at the mercy of these quacks? We might tell them that their personal resources must be very limited if they are reduced so low as to be obliged, like the vulgar, to have recourse to them; but it may be sufficient to show that the remedies of the charlatan cannot be depended on, liable as they are to be altered at his will, and that they may find themselves some day scoffed at by these very impostors, who have employed in their receipts only the same medicines which have been already well or badly administered by the regular physician."

Somewhat similar is the language of another eminent physician:—

"When I see, says Swediaur,* men, legally authorized to call themselves physicians, recommending a secret remedy to their patients, I am moved with pity and indignation, because nothing can more strongly prove the degradation into which medicine has fallen in France than to see physicians prescribing a charlatan's nostrum—a secret remedy—in preference to making use of those with the efficacy of which they

* *Traité des Maladies Syphilitiques.*

ought to be acquainted; or proposing to their patients to have recourse to the information of more experienced medical men if they feel themselves deficient in a particular department of the healing art."

We sincerely hope that this humiliating practice may be abolished, or else that medical societies will stigmatize those disingenuous individuals who join in the outcry against quackery, and yet by their conduct, lend it their fullest sanction.

A State Medical Journal.

L'empereur Napoléon, avec une ironie un peu dédaigneuse, disait un jour à M. de Fontanes: "Laissez—nous du moins la république des lettres."—GUIZOT.

Our anticipations in regard to this scheme have been fulfilled. At the late meeting of the Medical Society of Virginia, a majority of the 25 members present, who would not have constituted a quorum but for the passage, at the previous meeting, of Dr. Atkinson's resolution reducing the number of members necessary for this object; a majority of this small body, empowered a committee to establish a medical journal, to pay a financial agent from \$800 to \$2000, to pay considerable sums to printers, to buy out "on favourable terms" other medical journals, and made themselves and their 300 fellow members liable for whatever deficit might occur.

The executive committee of the Society subsequently met in Richmond to carry out its instructions, and, as every one who had paid any attention to the subject had foreseen from the beginning, Dr. Atkinson was elected "financial editor." The gentlemen upon whom the honour of working without pay was conferred, were Drs. Bolton, Lewis, Cabell, Thweatt, Marx, C. Johnson. Now, whilst we are willing to applaud the disinterestedness of the President of the Society, whose zeal for the promotion of medical literature is such as to induce him to be willing to change his residence, and to return to studies which he has long abandoned, still, we, who are to reap none of the benefits of the proposed undertaking, may be excused for not sharing in the sanguine expectations of its success, which Dr. Atkinson, who is to reap nearly all of the pecuniary benefit at least, indulges in.

We are utterly opposed to this enterprise, therefore, both as a member of the Medical Society of Virginia, and as a medical journalist.

As a member of the Society we are unwilling to give any three men unlimited powers to spend what money they please in founding a work which will, in all probability, prove an abortion, without other guarantee than a simple assurance, that we shall not be called on for a dollar. For, let it be well understood, the committee are not limited to the scheme which they plausibly set forth to the Society; their judgment alone is to determine the cost of the work. As a member of the Society, we object to the selection and exorbitant remuneration of one man, for the simple duty of supervising the publication of a pamphlet, for unless the ignoble office of "drumming up subscribers" is superadded to the duties of the financial editor, this will be the amount of the services which he will render.

As a medical journalist we think that we have a right to complain that the medical society has selected untried men, and given them an unfair precedence over those who have steadfastly maintained the interests of the profession, and have not feared to embark their personal property in an attempt to elevate its character. "Leave us at least," said Napoleon, the republic of letters." The advocates of this scheme dare not enter the lists relying on the merit of their publication alone; they are well aware that foeticide, or at the very farthest infanticide, would be the result. They shrink from fair competition, they come forward under the ægis of a society.

In England, too, they have attempted an oligarchy in literature. The Provincial Medical and Surgical Association last year founded a medical periodical, and hired Dr. Cormack to edit it. In a few months Dr. Cormack required that his salary should be doubled. We will quote a few paragraphs, in order to show the progress of this journal, which is the most contemptible one in Great Britain:

"When Sir Charles Hastings' 'sanguine friend,' Dr. Cowan, delivered his assurance that the expenses of the new *Association Journal* would not amount to more than £ 1300 per annum, he made a public confession of his ignorance of the details of a trade into which he was, nevertheless, ready to rush, and, as might be expected, within six months the facts recorded in his ledger have rebuked his prophecy. The expenses have exactly doubled the estimate. We find that during the last six months the payments on account of the journal have amounted to £ 1330 6s. 10d., which sum, doubled for the whole year, gives an aggregate of £ 2660. 13s. 8d. ! figures rather startling to the inexperienced eyes of the members of the Provincial Association. * * * * *

“The enormous expenditure entailed on the Association by its experiment in literature, has already necessitated important changes. The sum of £ 200 was voted last year, to the reform committee to meet their expenses ; this year that sum will be withheld. The abandonment of the volume of ‘Transactions’ is contemplated, and will, without doubt, take place. The secretary’s salary will go next ! Then the Benevolent Fund ! What a descent ! From charity to cheese-parings ! From science to merchandize ! From politics to puffing ! From legislating for the profession to angling for advertisements ! Since the Association is content to lie under the ineffable disgrace of competing, as journalists, with the private trade, it is no longer entitled to our respect as an independent and disinterested scientific body, and we shall, for the future, treat it as a company of joint-stock speculators, having no other object in view but how to get the largest possible return for their capital. They have descended to the level of traders, and, so long as they continue their occupation, we must regard them in the same point of view as we regard others engaged in similar enterprise. We observe that in the report of the council not one word of approbation of the journal is expressed, and even the pledged friends of the change, the journal committee, have contented themselves with declaring their ‘high satisfaction’ with Dr. Cormack in one sentence, and their ‘approbation’ of the printer and publisher in another ! but not a line is written in eulogy of the periodical. They were right : the journal will not bear panegyric, and, for the first time in the course of these events, the journal committee have evinced that they are not devoid of good sense and discretion.”—*Medical Circular*.

This then is what experience teaches in regard to such works.

Before concluding, we would put one question to our brethren in the profession : Which of two journals will be most likely to carry out their views, one that is entirely dependent upon them for encouragement or support, or one that is guaranteed against loss, and is only accountable to a Society which frequently cannot obtain a quorum of thirty members ?

In our strictures on this project we have not been actuated by hostility against its founders, but simply by a desire to protect ourselves from unfair opposition, and to prevent the destruction of whatever probability exists that the Medical Society of Virginia may attain to usefulness and prosperity. We view in this scheme the annihilation of this association. Unless we are much mistaken, when, in April next, the members are called upon to pay their quota of the expenses which are to be incurred, a melancholy list of resignations will be the Treasurer’s response. The enlightened Profession will not consent to con-

tribute to build up a literary enterprise for certain favoured individuals, to the detriment of those who only ask of them encouragement and approbation.

The Medical School of Vienna.

A school which is distinguished from all others in Germany, by the nature and unity of its doctrines, is that which Skoda and Rokitanski have founded at Vienna. These two professors are too well known, the one by his manual of pathological anatomy, the other by his treatise on auscultation and percussion, to make it necessary to review their principles. Skoda is a brief and concise professor. His clinical discourse usually turns upon diseases of the heart and lungs; his subjective and objective examinations of patients are made with minute exactness, his expositions of symptoms are characterized by marvellous lucidity, and are interwoven with condensed and striking remarks.

Convinced that diseases are subjected, in their progress, to laws which rarely vary, Skoda and his followers at Vienna take little account of therapeutics. It is going too far, however, to say that all medication is rejected at Vienna; blood-letting, for example, which is represented as being excluded from the treatment of pneumonia, is only restricted in its employment by precise indications.

Rokitanski, reposing upon his reputation, rather neglects his teaching to devote himself to microscopical research. He attends innumerable autopsies, twelve or fifteen daily; his course, less brilliant than some of those in France, is noted for its profundity and for the richness of its demonstrations.

Besides these two illustrious professors, are others who have had the merit of prosecuting the principles of anatomy in different specialities.

The second clinical professor, Dr. Oppolzer, has not yet published any work, and his great reputation has not therefore extended to other countries. The concourse of students in his wards, and his immense practice, are sufficient evidences of the confidence which he inspires. He was first professor at Prague, subsequently at Leipzig, and then at Vienna.

The two medical clinics last from seven o'clock to nine in the morning; from nine to eleven is occupied by the two surgical clinics, directed by Drs. Schuh and Dumreicher, both pupils of the celebrated Wattmann, and both excellent operators.

After the anatomical lectures, which are the next in order, comes the course of Dr. Hebra, who has charge of the service of skin diseases, comprising about one hundred beds. After this course, the pupils attend that of Dr. Sigmund, chief of a service of two hundred syphilitic patients.

The great hospital in which are united all the special clinics of which I have spoken, contains also wards for lying-in women.

Anatomy is taught by Dr. Hyrtl, well known by his injections, by his treatise on topographical anatomy, and by his work on general anatomy. Physiology is taught by Dr. Bruck, who has written a treatise on the anatomy and physiology of the eyes, the excellence of which has been proclaimed by Müller.

The ophthalmic clinic is very extensive ; it is confided to Dr. Rosas. Jaeger gives his lessons at a private dispensary.

Nowhere can be found such vast scientific materials concentrated in one place. The general hospital contains, in fact, the enormous number of 2000 patients. It is probably the largest hospital in the world. It contains, besides its wards, offices, and appurtenances, a laboratory, a museum, and amphitheatres. An insane asylum, recently constructed, and destined to receive 600 patients, is annexed to the hospital.—*Archives générales.*

Epidemics.—We desire to call attention to the circular of Dr. Peebles, which, for the sake of permanency, we have placed on an advertising page.

We sincerely hope that the physicians of Virginia and North Carolina will co-operate with Dr. Peebles in his efforts to accumulate materials for a report on the epidemics of these two States. Evidently, this vast task can only be accomplished properly by the combined labours of many observers in different sections of the country. We would call particularly upon the physicians of Martinsburg and of Hardy county, where choleriform diseases have prevailed during the past season—upon our colleagues in Fauquier, where scarlatina is now committing its ravages—and upon the Richmond committee on small-pox, for aid in this work, and we trust that those physicians who have met with numerous cases of pneumonia, dysentery and typhoid fever, will not fail to make known the results of their observation, and that the members of the profession everywhere, whose zeal for the honour and usefulness of medicine amounts to something more than mere words, will avail themselves of this opportunity of *doing* something for the advancement of medical science. It is unnecessary for us to say of the accomplished reporter of the committee on epidemics, that he is admirably qualified to arrange and collate the facts that may be submitted to him ; his reputation as a judicious physician and practiced writer is perfectly established.

Hæmorrhage from the Umbilicus.—We have received a letter from Dr. Francis Minot, to whose interesting researches on this subject we referred in a recent article, informing us of several errors in our statements therein. We hasten to render justice to our learned correspondent, even though, like Fénélon, we have to mount into the pulpit to read our own condemnation.

After remarking that in each of his forty-six cases of umbilical hæmorrhage, he was cognizant of the name of the reporter and of the attending physician, and that he was not, therefore, as we had supposed, led to an erroneous belief in the frequency of this disease, by meeting with several reports of the same cases, Dr. Minot goes on to say :

“ By a singular coincidence you yourself have been accidentally ‘ misled’ by ‘ the various reports of identical cases.’ Speaking of the *prognosis*, you say, ‘ if we add the six cases reported in this article to the forty-six collected by Dr. Minot, together with a fortunate case reported by Mr. Gage, we have a total of fifty-three cases, of which eight recovered, and forty-five, or more than ninety-one per cent. died.’ (I would here observe that by an error of the press, or perhaps by an oversight in calculation, a wrong decimal is given in the above result, the proportion of forty-five to fifty-three being more than *eighty-four per cent.*, and not ‘ more than ninety-one *per cent.*’) Now of the six cases reported in your paper, four, viz. : Nos. II., III., V. and VI. are included in my tables, and consequently were already employed in obtaining my results. Your estimate of the mortality at ninety-one per cent. (or eighty-four per cent., as corrected,) is therefore incorrect, some of the elements having been used twice in the calculation. Since my paper was published, I have collected four additional cases, including that of M. Roger, from the *Union Médicale*. Three of these were fatal. Adding your case, and that of Mr. Gage, the result may be expressed in this form :

		<i>Recovered.</i>	<i>Died.</i>
Collected by Dr. Minot,	50	8	42
Dr. Otis' case,	1		1
Mr. Gage's case,	1	1	
	<hr/>	<hr/>	<hr/>
Total,	52	9	43 or 82.6 <i>per cent.</i>

Since my attention has been called to this subject, I have preserved all the reported cases I have met with, and should any further results of interest or value be elicited, I shall lay them before the profession. In the meantime it will give me great pleasure to point out to you, or any other gentleman desirous of investigating the subject, all the sources from which my materials are derived.

Very respectfully yours,

FRANCIS MINOT.”

Scientific Nomenclature.—Paris, Graves, Latham, and others, have repeatedly complained of the inconveniences imposed upon the medical world by the extravagances of chemical and botanical nomenclature especially, and also by the ill-advised efforts of some individuals to reform our nomenclature of disease, and do not hesitate to assert boldly that benefit would accrue from reverting for the old system, and employing names which have no direct reference to the objects they are employed to designate.

In the course on the *History of Medicine from the Time of Hippo-*

crates, which Andral is now delivering, we find that Galen was sensible of this evil, and commented on it.

The learned professor is speaking of Archigenes, the most noted of the *Pneumatic Sect*, who went from Syria to Rome, and soon became one of the most popular physicians of that capital. Juvenal refers to him in his satires, and Alexander (of Tralles) calls him "divine," ο θεϊοτατος. He paid great attention to the pulse. He admitted eight kinds of pulse, subdivided into an infinite number of varieties, to all of which he gave new names.

In referring to the *neologism* of Archigenes, Galen engages in an interesting discussion with him. "I could wish, he said, to teach and to learn things without disputing about the terms by which they are designated. I desire to rebuke those sophists who waste their time in proposing modifications of generally received expressions. The precious time that should be occupied in learning things, is thus consumed in vain disputes about words. Whatever the words may be, let us agree upon their signification, and then proceed, without farther discussion, to the observation of facts. Our predecessors accepted the names they found established, and were contented to define their meaning with greater precision. The physicians of our day, on the contrary, are incessantly reforming the nomenclature, and impeding the progress of science by embarrassing it with new terms. Words, adds Galen, are of no importance as far as the knowledge of things is concerned. It is only necessary that the sense attributed to them should be understood; the simplest are the best.

Galen lays down a principle of general philosophy, according to which, in medicine as in all other sciences, the nomenclature should be composed of words taken at random, and without any absolute significance. "You discuss, Archigenes, exclaims Galen, in another passage, what is the meaning of a *strong pulse*; your discussion will never end; let this pulse be called διον, θεον, as you desire, will all dispute be avoided then? The important thing is to know the causes of this διον, or θεον pulse, and of what disease it is the index; science does not aim to determine words but things. Let us employ common terms, without caring for their propriety or impropriety, and let us only use new names to designate new things."

Andral agrees in the opinion of Galen. Nomenclatures founded upon the nature of objects, says the learned professor, are very inconvenient, and impede the progress of science. In giving the name of oxygen to the gas which is still called by that title, the illustrious father of chemical nomenclature long retarded the discovery of the hydracids. Undoubtedly it is desirable that all objects should be named with reference to their nature, but this nature, this essence, is still unknown to us, or at least our knowledge of it is very vague and incomplete. We are then exposed to the gravest errors by attempting to designate things by names expressive of their intimate nature.—*Cours professé à la Faculté de Médecine de Paris*, par M. ANDRAL, professeur de pathologie et de thérapeutique générales, 1853.

Credit System.—The credit system, so prevalent in this country, falls with peculiarly oppressive weight upon young professional men, and especially upon young physicians. Many estimable representatives of this latter class spend their all in acquiring medical knowledge, and, upon entering the profession, while they are compelled to pay cash for their board, office rent, and other necessary expenses, are bestowing gratuitous service on those capable of remunerating them, or waiting a year for more honest competent patients to discharge their dues. Consequently many sink under a load of debt, and recruit the ranks of cab-drivers and California miners, or are only saved from this fate by the helping hand of friends.

The members of the Burlington Medical Society have recently resolved that after January 1st, 1854, they will present their bills for professional services at the conclusion of each case of sickness.

The editor of the *N. J. Medical Reporter*, in noticing and advocating the general adoption of this important reform, makes the following judicious remarks :

“ The present credit system is objectionable because the services rendered are personal services ; and as the obligation of the physician to the patient ceases with the termination of the illness, the obligation of the patient to the physician should be discharged at the same time. * * *

“ The merchant, in disposing of a bill of goods on time, say six or twelve months, calculates that the purchaser will sell at a profit, in order to get the money to pay the creditor, and remunerate himself. Merchandize is the seal of the purchase—and it is often within reach of the seller, even when out of his possession, in the event of the buyer's default. We have no such security. The *commodity* (if such a term is allowable) rendered by us is *advice*, and as it is not, like the merchant's goods, to be bartered or sold again for a profit, we are entitled to its estimated pecuniary value at the time of its bestowal.”

We need hardly say how fully we agree in the foregoing observations. We trust the profession will take the matter into consideration.

Upper Canada Medical Journal.—We have received the first two numbers of a new series of this periodical, which is published at Toronto, in monthly numbers of 48 pages, octavo. The first series, it appears, was issued under the auspices of the medical school of that city. The profession, however, did not favour an enterprise designed for the aggrandizement of that respectable corporation, and the journal fell to the ground. The present editor, Mr. Stratford, hopes, by pursuing an independent course, to merit the support of his professional brethren of all parties. We sincerely wish him success, and take pleasure in placing his interesting journal upon our exchange list.

New Breast-Pump.—Among the innumerable conveniences with which the “Caoutchouc Industry” has supplied the useful arts, the

improved, and sometimes new, apparatus which it has furnished to the surgeon, are not the least important. Vulcanized india-rubber has been found to be the best material for various kinds of bandages, inhalers, and injecting apparatus; very useful mechanical leeches and cupping implements have been made from it, and Mr. Toynbee and the great Weiss have found that it supplies, better than anything else, the place of the membrana tympani that has been destroyed by disease.

Dr. Needham, of New York, has lately applied this useful material to the construction of a breast-pump, which is a convenient and elegant instrument. It consists of a glass receptacle, to which is attached a trumpet-shaped expansion, which, when it adheres to the breast, is productive of much less pain than is caused by the ordinary instrument. Exhaustion is effected by a bellows, which communicates with the glass receptacle by a flexible tube.

We have been gratified by an examination of this ingenious instrument, and can recommend it to the profession.

It is for sale by Messrs. Purcell & Ladd.

A New Medical Journal.—"The cry is still they come!" We have received the following prospectus of a new medical journal, to be issued under the auspices of the Medical Society of Virginia:

[Here follows the prospectus issued by the Committee of the Society, without other authority, so far as the minutes of the Society show, than the following resolution:

"Resolved, That the consideration of the expediency of establishing a medical journal as the property of this Society, be referred to Drs. Atkinson, Roddey and Bolton, whose duty it shall be to report, at the next regular meeting of the Society, the plan by which, in their opinion, the enterprise may be most successfully carried into execution, together with the probable cost thereof."—*Trans. Med. Soc. of Va.*, 1853, p. 25.

The italics are our own. As to the propriety of announcing under such a resolution that a journal "*will be published*," (See *Committee's Circular*,) we leave it to our readers to judge. The prospectus itself may be found in the last number of this Journal, p. 123.]

Two or three remarks are suggested by this scheme. In the first place, we cannot see, at this distance, why the Medical Society of Virginia should have passed by both the medical journals now in progress in Richmond. It occurs to us that one or the other of these excellent periodicals might have been made the vehicle for communicating their transactions; but there are doubtless reasons influencing the Society of which we are not apprised. We cannot, however, withhold the opinion that there is some danger of the business of medical journalism being overdone in the Old Dominion. But if the new journal must be added to the long list of our serials, we suggest to the Society that the number of editors proposed is too large. They will never be able to co-operate. Seven doctors to meet regularly and consult about the details of a medical quarterly! The thing seems to us wholly impracticable.—*Western Journal of Medicine and Surgery*.

MEDICAL NEWS AND ITEMS.

Medical Organization in Scottsville.—The medical men of Scottsville and the surrounding country held a meeting in Scottsville, on November 15th, for the purpose of forming a medical society. Dr. Charles L. Wingfield was appointed chairman, and Dr. James A. Forbes, secretary. A committee of three, consisting of Drs. Forbes, of Scottsville, Bledsoe, of Fluvanna, and Shelton, of Warren, were appointed to prepare a Code of By-Laws for the government of the Society. After adopting a tariff of charges, the society adjourned to meet in Scottsville, on Wednesday the 23d of November, for the purpose of forming a permanent society.—*Scottsville Gazette*.

The Old Dominion.—If we are not very much mistaken, we can see such a development of home talent, determined to make its mark in this old State, that the time is not far distant when but very few medical students will go further North to obtain a medical education. The young physicians of Virginia are making a noble effort to place medicine in their State where politics have always been—in the front ranks. We like her manners—we congratulate her on the number of young and talented men at present in the field, and would be pleased to see her do with the crown of medicine as Napoleon did with the iron crown of Charlemagne—put it on her own head.—*Philadelphia Med. and Surg. Journal*, Nov. 15th.

Three Cases of Poisoning by the Seeds of the *Datura Stramonium*.—The *Wheeling Argus* mentions that a little boy of five years, the son of a German named Blume, residing on 4th street, in that city, and a little girl of about the same age, after eating of the seeds of the thornapple, were seized with violent convulsions, and other symptoms of narcotico-irritant poisoning. The boy died.

A child of three years of age, was poisoned in a similar manner at Harrisonburg, a week or two ago. He returned home in a state of delirium. The prompt application of the stomach-pump removed the poisonous seeds, however, and he recovered.

The *Gazette des Hopitaux*, one of the oldest medical journals in France, and one of those from which we most frequently present extracts to our readers, has just received a donation of 10,000f. a year, from a physician attached to one of the hospitals in Paris, on condition—1st, that the donor's name shall be kept secret; 2d, that 3000f. of the sum shall be employed in encouraging the authors of useful and practical papers published in the *Gazette*; and 3d, that the remaining 7000f. shall be employed in distributing copies of the *Gazette* to physicians or students who are too poor to pay the whole or any part of the subscription—the simple declaration to that effect of the applicants being all that is to be required. This is probably the first time in the history of the periodical press that a journal has been the object of such munificence.

CHOLERA.—It is stated that the cholera has made its appearance at New Orleans. A despatch from that city, dated November 29th, refers to a meeting of the Board of Health, at which it was announced that cases of the disease had occurred in different sections of the city. During the week ending November 29th, 261 deaths had occurred, of which 129 were from cholera. Dr. Hester is reported to be among the victims.

Scarlatina.—The *Virginia Sentinel* says that the scarlet fever is prevailing to an alarming extent in Fauquier county.

Yellow Fever.—Private letters from Selma, Ala., state that there have been

fifty deaths in that town from yellow fever since the 13th of November.—*Bos'on Med. Journal*, Nov. 23d.

DR. WILLIAM JONES, a young physician of St. Michaels, Maryland, recently died of colonitis supervening upon remittent fever. Dr. Cox, president of the Talbot county medical society, in announcing this melancholy event, took occasion to add some appropriate and feeling remarks, from which we learn that Dr. Jones was a christian gentleman and a humane and judicious physician.

DR. R. L. SCRUGGS, corresponding editor of the *Southern Journal of the Medical and Physical Sciences*, a native of Cumberland county, Virginia, died at his residence in Shreveport, Louisiana, on the 27th of September last, of yellow fever. He is described as a physician of great worth, of indefatigable devotion to his art. He died in the fortieth year of his age.

The last number of the *Annales d'Hygiene Publique*, contains a review of a work, recently published at Turin, on the vital statistics of Sardinia. Among much other interesting matter contained in this analysis, we notice particularly an examination of the records of the hospitals of Verceil, Novaro, Vigevano, and Casale, localities in which a intermitent fevers are extremely prevalent, which is very favorable to the old doctrine of the antagonism of phthisis and fevers of malarious origin; and the following important evidence of the prophylactic power of vaccination: During an epidemic of small-pox, at Turin, out of 1000 vaccinated persons, only 1, according to the conscientious researches of Dr. Griva, was attacked by small-pox, whilst of 1000 who had once had variola, 3 suffered a second time. At Genoa, the ratio in each case was augmented, but the proportion remained the same: 3 in 1000, and 9 in 1000. Hence vaccinia would appear to be a better preservative than variola itself.

ARAGO.—In the last number we announced the sad intelligence of the death of one of the most glorious representatives of science—the illustrious Francois Arago.

He died at the Observatory in Paris, at six in the evening, of the 2d of October, after a long illness.

Arago was one of those rare intellects who enrich science by their labours, and diffuse it by the lucidness of their lessons and writings.

He succumbed to a diabetes complicated with albuminuria and general dropsy. He was born at Estagel, near Perpignan, the 26th of February 1786. He had been secretary-general of the Institute since 1830.

DR. MARSHALL HALL.—This eminent physiologist, who has been travelling for some months past in this country, for the benefit of his health, is now in Richmond. We understand that he has kindly consented to deliver a lecture, during his visit, upon his peculiar doctrines in reference to the “Diastaltic Nervous System.”

Jefferson's Notes on Virginia.—Mr. Joseph W. Randolph, the enterprising publisher of this city, is about to issue a new edition of this celebrated work, illustrated by maps, and furnished with a preface by George Randolph, Esq., an intelligent member of the Richmond bar.

Mortality in Emigrant Vessels.—(NEW YORK, Nov. 28.)—The ship *New World*, which arrived this morning from Liverpool, lost seventy-five passengers by cholera.

The ship *George Hurburt*, just arrived from Havre, also lost 75.—*Dispatch*.

BIBLIOGRAPHICAL INDEX.

- I. *Journal für Kinderkrankheiten. Herausgegeben von Drn. BEHREND und HILDEBRAND. Erlangen.*—Band xviii., Heft 4, 5, 6.
Journal for the Diseases of Children. Edited by Drs. BEHREND and HILDEBRAND.

The numbers of this journal for the second quarter of 1852 contain the following original articles :

1. *Observations upon spasm of the glottis*; by Dr. Lederer.
2. *On the treatment of croup by fomentations of ice around the neck*; by Dr. Borchman.
3. *On syphilitic iritis.* (Cases taken from an English journal, *The Lancet.*)
4. *Reminiscences of practice among Children*; by Dr. Riecke.
Verminosis. (A child of four years died suddenly, while straining to have an evacuation. He had passed sixty worms within a few days before his death, and had suffered from colic and vomiting. No physician had been called. The author, at the autopsy, found large lumps of lumbricoid worms; there were 88 of these worms in all.) *An opening in the cranium of a child, developed spontaneously.* (A child of three and a half years, in the short space of six or seven months exhibited a complete absorption in the bones of the skull, by which was left an opening resembling that made by the trephine; the dura-mater was healthy. The child died in convulsions, and at the autopsy a second loss of substance was discovered.) *Reflections on Croup.* (Criticisms of the assertions of those physicians who pretend to cure so-called croups, which, in reality, are only more or less acute cases of bronchitis. There is a coincidence, according to the author, between the invasion of croup and the constitution which may be called rheumatismal; the disease is most common from November to May. The author has cured but a small number of true croups, and finds it difficult to say under what remedial influence the recoveries occurred, only he can affirm that antiphlogistics did not appear to him to be of great service.)
5. *On invagination in children*; by Professor Rilliet. (A monograph in which the author has grouped together the facts relating to this affection which are scattered through various periodicals.)
6. *Report of diseases treated, during the first quarter of 1852, at Dr. Hauner's Children's Hospital*; by Dr. Alfred Vogel, of Munich. (We notice in this report 7 cases of foetid ulceration of the mouth cured by chlorate of potash; the treatment of apthous stomatitis by

nitrate of silver externally, (gr. ij. ad ʒj.,) or even internally, ($\frac{1}{4}$ to $\frac{1}{2}$ grain to an ounce of water); 3 cases of spasm of the glottis, in which the tincture of musk with amber did good service; the treatment of ascarides by injections of warm milk and onions, followed by cold water enemata; a case of chorea cured by cold affusions. The itch is treated by creosote, obstinate eczema by Fowler's solution.)

7. *Of acute hydrocephalus excited by difficult dentition*; by Dr. Roth.

8. *Upon the morbid alterations of the liver in children which result from hereditary syphilis*; by Dr. Gubler. (Taken from the *Gazette Médicale de Paris*.)

9. *On the treatment of hydrocele in children*; by Dr. Schwartz. (This article is founded upon cases observed at the polyclinic of Professor Angelstein, of Berlin, who regards injections as dangerous in childhood. When fomentation and puncture do not suffice to cure hydrocele in children, Dr. Angelstein passes a thread through the scrotum, or excises a portion of the tunica vaginalis.)

10. *Fragments on children's diseases*; by Dr. Tott.

11. *General considerations on the diseases of infancy*; by Dr. Barthez.

12. *On the medical attentions required by children*.

13. *On the utility of opium in the diseases of childhood*; by Dr. Luzinsky.

14. *Of psychical influences as the sole cause of lateral curvature of the spine*; by Dr. Werner. (The author rejects all mechanical influences as causes of lateral deviations, and yet he cites many cases in which this affection was evidently induced by long continued malposition of the body. It is hard to tell what he means by psychical influences.)

Observations on spasm of the glottis; by Dr. Lederer, assistant-physician at the clinic for children at Vienna.

The author's views are supported by a large experience in hospital and private practice. More than 4000 cases of sickness among children annually come under his observation.

An abstract of the cases of asthma observed from January 1850, to June 1852, gives the following results:

Of 96 children affected with asthma, (59 boys, 37 girls,) 92 presented softening of the bones of the cranium, (*craniotabes*), with or without hypertrophy of the brain; the other diseases were acute hydrocephalus, 1 case; chronic œdema of the brain, 1 case; rachitis of the trunk and extremities without cerebral softening, 3 cases; malformation of the heart, 1 case.

Notwithstanding this remarkable coincidence of asthma with cranial softening, the author does not regard the latter affection as the only cause of spasm of the glottis, for ramollissement often exists without spasm, and the latter often exists in rickety children whose skulls are perfectly ossified; he believes, however, that the softening of the cranial bones must be regarded as one of the exciting causes of spasm, a

cause to which we must add great nervous excitability, a cachectic state of long duration, dentition, the rude air of winter and spring, and a certain atmospherical condition.

The treatment consists chiefly in the use of oxide of zinc, belladonna and opium. The author prefers the oxide of zinc because its use may be prolonged. He does not advise blood-letting. In cases in which the spasm is not violent, we should attend chiefly to the cranial softening; phosphate of lime and cod-liver oil should be given; the consolidation of the bone will be followed by the cure of the asthma.

On the treatment of croup by fomentations of ice about the neck; by Dr. Borchman, of Landshut.

The author correctly admits only one form of genuine croup, consisting in an exsudation of plastic lymph on the surface of the mucous membrane of the air-passages, an exsudation apparently caused by a peculiar condition of the blood, the nature of which is not yet known.

True croup presents, nevertheless, several stages, which authors have distinguished, and which are of importance in connection with the treatment.

The application of leeches, in this disease, is often difficult, and their action is too slow, and above all too uncertain; the author has therefore had recourse to ice as a substitute. He relates three cases of cure by this method. He does not conceal from himself that it may be objected that these were not true cases of croup, and in fact, in one of these instances, he could discover no sign of exsudation in the region of the pharynx; in another it was impossible to examine the throat, for the teeth were firmly clenched. In one only of these three cases was Dr. Borchmann able to distinguish a slight layer of exsudation upon the tonsils. This was the case of his own son, two years of age. The author does not administer nauseants, because he regards them as useless at the onset, and reserves them for a more advanced period of the disease, when it may become necessary to obtain the expulsion of false membranes. He cauterizes the pharynx when it is evidently the seat of false membranes. He employs ice water in the following manner:

The child had all the signs of true croup, except the presence of false membranes. The head was hot; deglutition difficult; he had had only two violent paroxysms. A folded cloth, dipped in ice water, was passed around the neck; two bladders containing little pieces of ice were placed on either side. Every half hour the cravat was renewed; the limbs were wrapped in flannel and were heated by bottles of warm water.

After the first one or two applications, the warmth of head, the restlessness and distress diminished; the child slept and ceased coughing. The treatment was continued from three in the morning until eight at night. A dry towel was then substituted for the bladders of ice, and the cold cloths was renewed every hour only, and after midnight every two hours. The next day the child seemed perfectly well. Nevertheless the fomentations with ice water were continued for two days, the compresses being changed every three hours.

The ice was applied in the same manner and under the same circumstances in the other two cases. The relief was perfect and permanent.

It is most earnestly to be desired that this treatment will be tried by other practitioners. It is probably not applicable to all periods of the disease, or even to all cases; it does not exclude the use of emetics and cauterization, but it appears to us to be a precious abortive method, the indications for which ought to be ascertained with precision.—*Gaz. Méd. de Paris*.

II. *Comptes-rendus Hebdomadaires des Séances de l'Académie des Sciences*. Par MM. les SECRETAIRES PERPETUELS. (Arago et Flourens). T. xxxviii, Numéros 1 à 13.

The *Académie des Sciences*, one of the five learned bodies composing the "Institute of France" contains sixty-five members, divided into eleven sections. Two of these sections are devoted to medical science. Six members are assigned to the section of Anatomy and Zoology, and six to that of Medicine and Surgery. In this assemblage of savants, the Medical Profession is worthily represented by such men as Roux, Andral, Velpeau, Civiale, Chomel, Bouillaud, Rayer, Lallemand, Magendie. Partly in order to obtain the judgment of these princes of the science, and partly, with the hope of obtaining some of the large prizes which it adjudges for improvements in medicine and surgery, for the means of rendering any art or trade less insalubrious, and for discoveries relative to the treatment of patients, almost all researches of importance in France are submitted to the Academy. An examination of its proceedings will therefore furnish us with a pretty accurate view of the progress of medical science in France. We propose from time to time to offer to our readers an abstract of these proceedings so far as they relate to medicine.

In the record of the meeting of July 4th, we find a note by M. Marchal (de Calvi) on the gangrene of *diabetic patients*. The author describes two cases of spontaneous gangrene of the lower extremities in persons labouring under the diabetic diathesis. M. Marchal recalled the fact that M. Laudouzy, of Rheims, had observed a case of gangrene of both legs in a person suffering from glucosuria.

At this same meeting, M. Robin presented a memoir upon the cause of death in animals killed by lightning, and M. Vincent reported an extraordinary instance of merycism. We have already analysed these two papers.*

—— At the next meeting but one (*July 18th*), M. Baudens, a military surgeon attached to the hospital of Val-de-Grace, who frequently obtrudes himself upon the public with very little to communicate, read a long memoir on anæsthesia. He informs us that during the past three years much has been written on the history, physiology, and pathology of chloroform, very little on the risks of anæsthesia. Surely we knew all this. *But what is needed*, he says, *is the synthesis*, or, if you choose, *the proper regulation of chloroform*. No one so ca-

* See *Va. Med. and Surg. Journal*. Vol. II, p. 65.

pable certainly of restoring discipline as a military surgeon, therefore we looked eagerly for the rules M. Baudens would give. What a disappointment! The academic prolusion of M. Baudens is a mere compend of the truisms which have been reiterated on this subject for the last three years. *The patient's constitution must be examined. He should be calm. Patients have always died of nervous exhaustion. The patient should abstain from food previous to the administration. The chloroform should be administered by an intelligent assistant. Necessary restorative agents should be at hand, to be used in case of accident.* M. Baudens evidently conceals nothing that he knows, but we cannot discover that he advances any novelty whatever.

———— July 25th. M. Pasteur read a memoir upon *the alkaloids of cinchona*. This purely chemical essay was designed to describe the general properties of the known alkaloids of bark, and the characteristics of several new alkaloids. Thus the author demonstrates that in heating a salt of cinchonine, the sulphate, for example, we obtain, under certain circumstances, a new base—*cinchonidine*; if we proceed in the same way with a salt of quinine, *quinidine* is the result. M. Pasteur subsequently proves that, under the name of quinidine, two distinct bases have been described, which he designates under the names of *quinidine* and *cinchonidine*. Therefore in cinchona bark, there exist four principal alkaloids: quinine, cinchonine, quinidine and cinchonidine; farther on, in treating of quinidine, he shows that this is only an alteration of the alkalies of bark, and that this alteration is effected by exposing any salt of quinine or cinchonine to the sun for a few hours. The practical deduction from this fact is that Peruvian barks should be kept and dried in a dark place.

———— August 1st. M. Boinet presented a memoir on injections of iodine in *fistula-in-ano*, which we have already adverted to (see p. 147 ante); and M. de Saussure transmitted some observations relating to two individuals represented as members of the Aztec race. We shall not reproduce the anatomical details given by the author. They are less minute than those which Dr. J. M. Warren has furnished in the *American Journal of the Medical Sciences*. The author finds it difficult to believe that the small stature of these curious creatures is due to an arrest of development. He places their age at from 10 to 11 years. At this meeting a communication was received from Professor Agassiz in reference to the ichthyology of the United States. The eminent naturalist dwelt particularly upon a new genus, discovered in the rice swamps, resembling the blind fish of Mammoth Cave, the *amblyopsis* of Delkay. "My new fish, he says, has no VENTRALS, although provided with eyes, and having the anus under the throat."

———— August 8th. M. Boussingault communicated some experiments which he had made upon the quantity of ammonia contained in rain-water remote from cities. These researches, which may interest public hygiene, demonstrate that the rain water of Paris contains far more ammonia than that collected on the eastern slope of the Vosges mountains. From the 26th of May to the 5th of August, this skillful chemist had experimented seventeen times; the water contained

scarcely more than 1 milligramme of ammonia to the quart. The rain-water examined at the Observatory in Paris averages 3mg. 35 in a quart, and has even contained 5mg. 45.

M. Maisonneuve presented to the Academy, a young man on whom he had extirpated, three weeks before, an *exostosis of the whole right lateral mass of the ethmoid*; this tumour, of the size of a small hen's egg and as hard as ivory, had completely expelled the eye from its orbit and caused the patient intolerable suffering. The tumour was excised; the eye was returned to its place, and had already recovered its functions. There was scarcely any deformity whatever.

—— August 29th. M. Marchal (de Calvi) addressed a communication to the Academy, entitled: *a contribution to the history of diabetes*. After detailing two cases, one of gangrene of the trunk and thigh in a diabetic patient; the second, of diabetes complicated with paraplegia, amaurosis, and furunculoid eruptions, the author concluded his memoir by several propositions, which are far from being demonstrated. We will quote them without commentary.

1. Many individuals may suffer from diabetes during long years without its being recognised, the symptoms being so slightly marked;
2. We should never fail to examine the urine of persons who complain of habitual fatigue and of weakness in the lower extremities;
3. Urine of normal density may contain sugar; it may even happen, in debilitated individuals, that the urine may be of less density than usual;
4. Reagents often undergo a modification, by which they become unfit to discover the presence of a small quantity of sugar;
5. Sugar may exist in the urine in a quantity sufficient to constitute diabetes, and the polarimeter may not indicate its presence;
6. An ammoniacal salt in diabetic urine may prevent or enfeeble the reduction of the binoxide of copper by the glucose;
7. In this case, an excess of caustic potass favours the reaction;
8. Patients suffering from diabetes are subject to pustular and furunculoid eruptions, necrotic phenomena, which are sometimes the prelude of true gangrene, of which, to my knowledge, there are now five instances;
9. It is particularly important to examine the urine of persons affected with pustular and furunculoid diseases, and with (so-called) spontaneous gangrene;
10. It is possible that glucosuria may produce paraplegia, as it does amaurosis, therefore it is desirable to examine the urine in cases of paraplegia, as well as in cases of amaurosis;
11. The treatment of diabetic paraplegia is simply the treatment of diabetes. It is supposed that the abuse of sugar in alimentation is a cause of amaurosis and paraplegia, and it is not an impossibility that the increase in the frequency of paraplegia is due to this cause.

—— At the same meeting M. Casaseca presented a communication in reference to the small quantity of iodine contained in the water of the river Almendara, which supplies the wants of the inhabitants of Havana, Cuba; and noting also the same deficiency of iodine in the atmosphere and plants of the tropics. It is well known what conclusions some persons, more chemists than physicians, have drawn from the researches of M. Chatin, on the quantity of iodine in different wa-

ters. The absence of primary goitre in Havana and in the whole island of Cuba, would lead us to believe that the water of the Almen-dara was very rich in iodine; experiment shows that it contains scarcely a trace of this element.

—— M. Jobert (de Lamballe) read, at the same meeting, a memoir upon the *influence of electricity in the accidents caused by chloroform*. This surgeon first describes the various methods of administering chloroform. Sometimes he gave it pure, sometimes mingled with atmospheric air. When the heart had ceased to beat for some instants, it was impossible to recall life, but, until this point was reached, electricity proved itself, in the hands of M. Jobert, a powerful agent. It was sometimes applied to the surface of the body; in other cases it was passed through the organs by electro-puncture. In all cases the electric action must be somewhat prolonged.

—— September 12th. M. Maisonneuve presented a memoir upon a peculiar variety of gangrene, accompanied by the development and circulation of putrid gas in the veins. He proposed to establish: 1. That in a certain variety of traumatic gangrene, that, namely, which succeeds a violent contusion of tissues, gas is developed in the interior of the veins during the life of the patient; 2. That this gas may circulate with the blood, and destroy life by rapidly poisoning the economy; 3. That, notwithstanding its excessive gravity, this accident is not absolutely beyond the resources of art. M. Maisonneuve reports two cases in support of the ideas, one of which was terminated by death, the other by recovery, after an amputation. During the operation, bubbles of gas escaped from the cut extremities of the veins.

BIBLIOGRAPHICAL RECORD.

- I. *Practical Observations on Aural Surgery, and the Nature and Treatment of Diseases of the Ear*. With illustrations. By WM. R. WILDE. Philadelphia: Blanchard & Lea. 1853. 8vo., pp. 475. (From the publishers).

“Such is the division of labour in these days, that a distinct profession is founded upon the operation of squirting water into the external ear; it is true that other operations are talked of by these Aurists as they style themselves, but the advantage to be derived from any of them, is often very doubtful. The fools who apply to such charlatans deserve to have their pockets well drained, but ought scarcely to be poisoned by them.”
LISTON.

Here is a work which is something more than a repetition of the opinions of others; it is a concise and interesting account of the au-
VOL. II.—30

thor's own views and experience on a most important and neglected subject. Such works are unfortunately rare now-a-days. This one, it is said, has occupied the author for ten years.

We cannot always commend the writer's style. It is too often controversial and even offensively disputatious, and we fear that it will impair the usefulness of his work. Mr. Wilde not only denounces quacks with inexorable severity, but he attacks legitimate physicians, who have zealously cultivated his own department, with a rancour that indicates malevolence. Like Timon, his "bite is general." He takes up the cudgels with a view of annihilating the propagators of error, but his foot once in the ring, his arm once fairly raised, he punishes alike both friend and foe. Our recollection of the only occasion on which we have ever met Mr. Wilde, induces us to believe that the impressions of his character which we have derived from reading his work, are not erroneous. It was at the ophthalmic clinic of M. Desmarres, who, though unable to converse with his distinguished visitor, took occasion to exhibit to him several of his peculiarities of practice. As he could do so without being understood by Desmarres, the redoubtable Irishman took occasion to indulge, in conversation with the foreign physicians present, in strictures upon the therapeutical views of that eminent surgeon, which were as ungraceful as they were unjust.

The fault we have signalled does not blind us to the many excellencies of Mr. Wilde's book, and, as an evidence of our appreciation of its importance and value, we shall proceed to bestow upon its contents as extended a notice as our limits will permit.

Mr. Wilde justly observes that in aural diseases, as in all other diseases, the first grand point is accuracy of diagnosis, and enters minutely into a description of the best mode of conducting an examination of the ear. After carefully noting the condition of the external ear and surrounding parts, in a strong and direct sunlight, the upper rim of the helix should be drawn upwards, backwards, and outwards, while the thumb of the other hand draws the tragus and the integuments forwards, and exposes the outer third or more of the auditory canal. Mr. Wilde sometimes uses a little gorget-shaped instrument as a depressor in this manipulation.

"The finger should then be pressed deeply and firmly upon the moveable root of the tragus, and backwards into the depression between it and the articulation of the jaw. While the finger is retained in this position, the patient should be desired to open and shut the mouth, and the amount of pain or inconvenience experienced on pressure in those two different positions of the jaw should be accurately noted. The middle and fore fingers should also be inserted deeply behind the ramus of the jaw towards the styloid process, and notice taken of the sensations there experienced."

In proceeding to enquire into the condition of the internal portion of the auditory canal and external surface of the membrana tympani, any mechanical impediment to vision must be removed. If the obstruction is complete, it will be necessary to use the syringe, but it will be best to remove hairs and inspissated cerumen by fine forceps, as sy-

ringing, even with warm water, causes an increased vascularity which may mask the actual amount of disease present.

For examining the membrana tympani, Mr. Wilde recommends tubular silver speculums of different sizes, and repeats the vulgar objection to the ordinary bi-valve speculum. Every one knows that the auditory canal is composed of two parts, an external, fibro-cartilaginous portion, and an internal, osseous canal in the temporal bone. The soft portion is more or less flexible and dilatable, the other is not. The obliquity of the meatus depends upon the angle formed by the axes of these two portions of a cylindrical canal. The external portion alone is distensible, no one ever dreamed of dilating the osseous portion. And yet this is the objection to the bi-valve speculum. The simplest examination of the application of that instrument proves that it corrects the flectuosities of the membranous canal, augments its diameter, prevents the inflexion of the tragus, and permits the light to reach the external surface of the tympanum. We hope, therefore, that it will still be employed. Mr. Wilde devotes three pages to a description of the silver tubes which he has imitated from Dr. Gruber, of Vienna, and makes the ridiculous assertion, that without *this* speculum, "it is impossible to form an accurate diagnosis."

The colour, transparency, thickness, and vascularity of the membrana tympani,—its tension and flexibility, as well as the direction and projection of the handle of the malleus, should be carefully observed. While the membrane is within the field of the speculum, the patient should endeavour to force air into the drum by shutting the mouth, holding the nose, and making a forced expiration. The sound thus produced is a sort of *thug*, resembling that of a dried bladder suddenly inflated. "While the air is thus pressed into the drum, we should note accurately whether the membrane vibrates, or its tensility is altered, and if so, whether it regains its original position suddenly or gradually." By a forced inspiration of this kind we may often discover a perforation so minute that it would escape the eye, as the air will pass through it with a peculiar whistling sound, which is more audible through the stethoscope. By the peculiarities of sound we may judge whether the middle ear or the Eustachian tube is dry, or thickened, or filled with mucus. If the patient is unable to inflate the tympanum, we must have recourse to injections of air. A catheter must be inserted into the Eustachian orifice, and connected by a flexible tube with a bellows or chamber of condensed air. Mr. Wilde in this connection lays down two aphorisms, which are well worthy of attention. "Whenever the patient is himself able to inflate the tympanum never use any artificial means to do so," and "where there is reason to believe that the cavity of the drum is inflamed, carefully abstain from all poking with catheters."

"The only solid instrument with which I now ever venture to explore the Eustachian passage, and that only for a short distance, is an ivory bougie, rendered flexible by having the earthy matter removed by immersion in acid, and the point of which for an inch at least has been previously softened in water so as to resemble a piece of gelatine." P. 83.

Mr. Wilde observes that catheterism of the Eustachian tube is, after all, rarely required, and that in the majority of cases, it is as powerless to remove deafness "as the almost indiscriminate removal of the tonsils, recommended for a like purpose a few years ago, has proved to be."

For cleansing the external meatus, the author recommends a brass syringe, capable of holding three or four ounces, observing that the ordinary pewter and glass instruments, are of little or no use. In this connection, the editor introduces a drawing and description of an ingenious instrument invented by Dr. S. P. Hullihen, a surgeon dentist, of Wheeling, Va., which enables persons to syringe out the external meatus, without assistance.

The *degree of deafness* may be learned, and the hearing distance measured, by holding an ordinary watch near the external meatus. The complicated instruments invented for this purpose, are unnecessary. The watch should also be placed between the patient's teeth, and the amount of hearing in all these cases should be noted.

"The degree of hearing with a watch is sometimes deceptive; some patients who cannot hear with a watch, or even a clock, will hear the voice, even in a low tone; but these are the exceptions to the rule. Except in cases of congenital or acquired deaf-dumbness, total deafness is a rare affection, much more so than total blindness." P. 88.

The condition of the throat, the palate, uvula, tonsils, and pharynx, should next be enquired into, particularly as regards the state of the mucous membrane; and we should press firmly with the finger beyond the arch of the palate, opposite the mouth of the Eustachian tube, and observe the amount of inconvenience this causes there and in the middle ear. Something may be gleaned from the character of the *voice*, which is commonly altered in long continued deafness.

"Having proceeded thus far, we may enquire into the history of the disease, its duration, assigned cause, the pain, noise, the probable hereditary nature of the complaint, etc., and hear the subjective symptoms, in the usual manner in which we would proceed to examine into any other medical or surgical case."

Mr. Wilde believes that the value of tinnitus as a diagnostic has been greatly overrated. It is common to almost all, and peculiar to none, of the diseases of the ear. Its peculiar characters are no more dependent upon the causes of the deafness or upon the structures engaged, than the peculiar forms of ocular spectra are contingent upon the parts affected in ophthalmic or cerebral disease. Tinnitus seldom or never co-exists with an open tympanic membrane, and hence the operation of perforation has been proposed as a remedy for it.

By attention to the rules of examination which we have briefly recapitulated, Mr. Wilde believes that we ought, in almost every case, to be able to form a tolerable accurate diagnosis.

Our author now passes to a consideration of the general therapeutics of aural affections. "As most of the diseases of the organs of hearing are originally of an inflammatory character, depletion is strictly

enjoined." In severe otitis, the author recommends cups, but leeches usually answer best. They are more efficacious when applied in front of the tragus than upon the mastoid region. Mr. Wilde knows of no painful affection in which local depletion produces as much immediate relief as in diseases of the ear. It should be resorted to again and again, even on the same day, to relieve paroxysms of pain. Counter-irritation is to be effected by the ordinary fly-plaster, but in chronic cases pustulation by tartar emetic is preferable. Where there is much neuralgic pain, the compound camphor liniment and extract of belladonna, are the appropriate remedies. The application of heat and moisture is very grateful. Steaming the ear by the vapour of very hot water, containing hyoscyamus, opium, or belladonna, often gives comfort. "Fomentations and stupes are not as efficacious in aural as in ophthalmic inflammations."

"Under no circumstances should we pour any stimulating or sedative liquors into the ear. This practice is often the cause of myringitis. Why are not these essential oils, stimulating liniments, this turpentine, creosote, tincture of cantharides, oil of origanum, etc., poured into the eye, or injected into the urethra, in cases of inflammation of these parts? Why do not surgeons prescribe a roasted onion, or a boiled fig, for inflammation of other parts as well as the ear?" P. 97.

Mr. Wilde has no faith in either electro-magnetism, galvanism, or electricity in relieving deafness. "I never knew a case unamenable to other treatment cured by any of these means," he says.

Mercury, however, is of all medicines, that which our author has found to act most beneficially in diseases of the ear, simply on account of its specific efficacy in controlling inflammation or in removing its products. Mr. Wilde frequently employs calomel, and in speaking of its application to diseases of the ear, he gives a very interesting description (p. 101) of the phenomena accompanying its action. In some sub-acute forms of aural disease, hydrargyrum cum-creta, in combination with cicuta, will be found efficacious.

"The third, and perhaps the most efficacious form, in which mercury may be used, is that of the bichloride, still commonly known in this country as the oxymuriate, one of the most valuable medicines of the entire Pharmacopœia. A treatise might be written on the virtues this remedy, and the vast field of disease over which it exercises a sanative influence. Combined with Peruvian bark—which the chemists say is incompatible, but the product of the decomposition said to be produced by which, may be the very substance which acts most beneficially—it is almost a panacea for most of the strumous inflammations in children and young people; and its power in controlling scrofulous ophthalmia, corneitis, and iritis, &c., extends equally to the cure of kindred affections in the ear. It is the best remedy I know of for inducing absorption of lymph deposits in the membrana tympani, and general thickening and opacity of that structure, as well as very old cases of chronic inflammation of the membrane of the cavitas tympani. It is, moreover, when properly administered, one of the safest as well as the surest preparations of mercury: it may be taken for a great length of time; it seldom interferes with the ordinary occupations or amusements of the individual; it leaves no ill effects; it rarely induces

ptyalism; and patients improve in health, and absolutely grow fat while using it.* It may be given alone, either in pill or dissolved in nitrous ether, proof spirits, or some of the tinctures, such as cascarilla, but it is much more soluble in distilled water than is generally known; it may be combined with the muriated tincture of iron with good effect, or with some of the preparations of sarsaparilla; but bark—either the tincture, syrup, or decoction—is of all others the medicine best suited for its administration. Our Dublin preparation of the syrup is, particularly for children, a good vehicle for it, provided the mineral is first dissolved in a little distilled water. Oxymuriate of mercury and bark sometimes disagree, producing, shortly after being taken, pain in the stomach, tenesmus, griping, and even diarrhœa; in such cases it will generally be found that it was taken before breakfast or on an empty stomach; it should therefore be administered an hour or two after meals. But when it disagrees, even with such precautions, a separation of the constituents will obviate the unpleasant effects: thus the mercury may be taken an hour or two before or after the bark. From the sixteenth to the eighteenth, or even a quarter of a grain, may be taken three times a day, according to the circumstances of the case, for weeks and even months together, with, however, short intervals occasionally.” P. 101.

The author observes that the preparations of iodine and potassium may be employed in aural affections constitutionally. The only remedy he has found to exercise any influence over tinnitus aurium is *arnica montana*.

The third chapter is perhaps the most valuable in the work. It contains several statistical tables, which, being the results of observations made at St. Mark's Hospital, in the presence of the profession, must possess the highest value among such investigations. At page 120, is a list of 200 cases, taken from upwards of 2000, the symptoms and progress of which are so fully detailed as to satisfy the wish of every inquirer. The author cannot achieve this useful task without belabouring another industrious statistician, Dr. Kramer, of Berlin. Mr. Wilde does not

“Just hint a fault, and hesitate dislike;”

he assails his adversaries with coarse ridicule, and hoots at them with unjust abuse. We are sorry to say that he also distorts the meaning of their writings, and mis-quotes their expressions. At page 111, he quotes as follows: Kramer says “the use of the ear-catheter is the only means, either by blowing through it, or by injecting compressed air from the air-press, or by the introduction of a catgut string, or a small whalebone, or ivory tube, to learn the condition of the Eustachian tube and the cavity of the tympanum, and thereby, in the case in question, *to judge of the condition of the auditory nerve!*” We can find no such expression as this in our copy of the works of the celebrated Prussian surgeon, but on the contrary we find (*Medical Times and Gazette*, Oct. 22d, p. 434,) the following remark: “I never recommended or made use of a whalebone or ivory probe or bougie to

* I understand that the bichloride of mercury, in large doses, is used to fatten and improve the condition of horses in the West Indies.

be introduced into the Eustachian tube, still less into the cavity of the tympanum."—*W. Kramer*. At page 113, Mr. Wilde asserts that Kramer does not know what the healthy appearance of the membrana tympani are, and at page 335 he accuses that surgeon of not giving an accurate account of the state of the membrana tympani in chronic inflammation of the middle ear, whereas Kramer (2d ed., p. 532,) states that, in these cases, that membrane is smooth, shining, transparent, and very seldom of a dead white colour, statements which do not differ from those advanced by Mr. Wilde. At page 212, Mr. Wilde observes that "it will appear almost incredible, that Dr. Kramer should believe that even a forcible stream of air from the air-press cannot alter the concave form of the membrana tympani." Dr. Kramer expressly calls attention in his work (2d ed., p. 316,) to the roll-shaped elevation on both sides of the handle of the malleus produced by forcing air into the tympanum by a strong expiration, the mouth and nostrils being closed. At page 279, we find the unfortunate Kramer accused of denying that some forms of deafness are improved by loud sounds occurring in the vicinity; whereas at page 259-264 of the English translation of Kramer's work, it is expressly stated that patients often experience an amelioration of their symptoms when riding in a carriage, or when in the vicinity of loud noises.

It would be an easy task to multiply instances of Mr. Wilde's inaccuracy and injustice, and were we to recapitulate his criticisms, which appear to us improperly harsh, our task would never end. We may remark, however, that if Mr. Wilde indulges too much in the rude detection of the faults of his cotemporaries, he at least, as Johnson said of Dryden, "proves his right of judgment by his power of performance." His work certainly contains more information on the subject to which it is devoted than any other with which we are acquainted. We feel grateful to the author for his manful effort to rescue this department of surgery from the hands of the empirics who nearly monopolize it. We think that he has successfully shown that aural diseases are not beyond the resources of art; that they are governed by the same laws and amenable to the same general methods of treatment as other morbid processes. The work is not written to supply the cravings of popular patronage, but is wholly addressed to the profession, and bears on every page the impress of the reflections of a sagacious and practical surgeon.

We have not space to refer to Mr. Wilde's observations on special diseases. In all of them we find the same general plan: an attempt to apply the general pathological and therapeutical laws which guide us in the examination and treatment of other diseases, to the affections of the auditory apparatus. Those who examine the work with the hope of finding "new cures for deafness" will be disappointed. The only "new cure" which Mr. Wilde mentions is glycerine, and he only alludes to this in order to castigate the extravagant pretensions put forth by its admirers.

In regard to incurable diseases—the favourite theme of theorists, and the paradise of quacks, Mr. Wilde supports no knavery or illu-

sion; he honestly avows the small power that the skill of the present day has over these distressing maladies.

On the whole, we have no hesitation in expressing the opinion, that this work will raise the author's reputation, and that it will hereafter be the standard work on the subject in this country.

II. *A Treatise on the Venereal Disease.* By JOHN HUNTER. *With copious additions.* By PHILIP RICORD. Edited, with notes. By FREEMAN J. BUMSTEAD, M. D., Physician to the North-western Dispensary, New York. 8vo., pp. 520. With plates. Philadelphia. Blanchard & Lea. 1853. (From the Publishers, through A. Morris.)

Our readers are aware that among the works of Hunter there is perhaps none more important, none certainly which has exerted greater influence on the medical mind, than that devoted to venereal diseases. This work, of which the great masters of the subject to which it is devoted have in all times entertained the highest opinion, shows us strikingly how far beyond his generation Hunter advanced. With two or three well known exceptions, due to too hasty generalization, the most important views contained in it are still taught in our day; and, in regard to the doctrines of syphilis, the epithet "Hunterian" is almost synonymous with what is true and established.

In 1840, Dr. Richelot, the amiable and learned director of the *Union Médicale*, and the translator of Sir Astley Cooper, presented this work to the French medical public, with annotations and additions by the celebrated Ricord. It was soon in the hands of every practitioner and student, and acquired at once the authority of a work destined to become a classic. Since then this anticipation has been fully realized, and the reputation of the work now fully corresponds with those of the author and annotator.

In 1852, a new edition was published, and M. Ricord's additions were revised and augmented. Dr. Bumstead has translated these notes, and has incorporated them with Babington's edition of Hunter, which is the one usually regarded as most reliable.

Two distinct merits recommend this work to the physician. We are pleased, in the first place, to see the seeds of truth, sown by the great Hunter, fructified long afterwards by the laborious and persevering experiments of Ricord. Every one will recognize the attractiveness and value which this work derives from thus presenting the opinions of these two masters side by side.

But, it must be admitted, what has made the fortune of the book, is the fact that it contains the "most complete embodiment of the veritable doctrines of the *Hôpital du Midi*,"* which has ever been made public. The doctrinal ideas of M. Ricord, ideas which, if not universally adopted, are incontestably dominant, have heretofore only been interpreted by more or less skilful secretaries, sometimes accredited and sometimes not. The *Traité de l'inoculation*, published in

* See *Va. Med. and Surg. Journal*. Vol. I., p. 79.

1838, treated venereal affections only under a narrowly practical point of view; the "letters" of which the journals and Dr. Lattimore have lately given us such a surfeit, were exclusively controversial.

In the notes to Hunter, the master substitutes himself for his interpreters, and gives his original thoughts to the world; in a summary form, it is true, but in a lucid and perfectly intelligible manner.

Our readers are well aware that M. Ricord defends with the ardour of an enthusiast, and all the resources of ingenious logic, certain laws, which he considers absolute and immutable: such are the unity of the syphilitic virus, that the chancre is the only source of the syphilitic virus, the non-transmissibility of secondary symptoms, and the immunity from future attacks of syphilis of those who have suffered from tertiary symptoms. On the other hand, there are learned and eminent practitioners who constantly oppose his laws by facts, his theories by experience. M. Ricord finds ingenious explanations for these objections; his blind admirers denounce them altogether. We believe that the unprejudiced reader who will examine the facts offered by Roux, Velpeau and Gibert, will neither desire to denounce them or to explain them away. Among these facts, there are some, says Roux, so evident, so clear, so conclusive that it is impossible to resist being impressed by them. Are the laws proposed by Ricord thereby confuted? We think not. The laws laid down by Ricord are empirical, that is to say, they are the result of experience alone. The author maintains that things take place with the constancy and regularity which he describes, because he believes that he has seen them always occurring in this way. Having observed them to occur in a certain way a great number of times, he is convinced that they cannot occur otherwise. We are not now speaking of a conditional law, subordinate to a known cause, modified by conditions, but of an absolute law, based upon the invariableness of the facts it affirms; in a word, of a law of observation. But who does not perceive that the certainty of this law is a pure question of figures; the moment it is found to contradict facts, we must compute these facts, and infer, from the number of exceptions, the generality of the rule. The rule would then be less marvellous, less constant than the rising and setting of the sun, but it would be quite as logical, and not less certain.

Applying these reflections to M. Ricord's propositions, we have general *facts*, instead of general *laws*: we say that syphilis is ordinarily and almost invariably manifested primarily by a chancrous sore; that constitutional infection is almost constantly indicated by an indurated chancre; that secondary symptoms are rarely transmitted; that secondary symptoms usually appear in from six weeks to six months after inoculation; and that it is very rare indeed for persons to contract syphilis who have once had tertiary symptoms. This is what observation and experience teaches. There is no logical reason why these exceptions should not exist; there are many why they should. They do not diminish the value or utility of laws which they contradict only exceptionally. We believe that the inventor of these laws

would do himself more credit by seeking the causes of their occasional variation, than by systematically affirming their immutability.

To return to the work before us. Dr. Bumstead has given us a translation which is always faithful, undeformed by foreign idioms or gallicisms, and generally spirited and elegant. Two specimens of his graceful style may be found in former numbers of this Journal,* and obviate the necessity of extracts on the present occasion. We find many judicious annotations wherever the text of Ricord is obscure, and additions wherever it is incomplete. Among the latter we may particularize some very instructive observations on the rational diagnosis of chancre, which occur on page 278. The editor has taken care to incorporate in his notes the views of Vidal, Egan, and other recent writers on syphilis, when they seemed to merit attention, and altogether has achieved his task in a most creditable manner.

The lithographic plates which are annexed to the volume are by no means inferior to those of the original work.

In conclusion we can say that this is incontestably the best treatise on syphilis with which we are acquainted; and, as we do not often employ the phrase, we may be excused for expressing the hope that it may find a place in the library of every physician.

III. *Traité clinique et pratique des Maladies des Enfants.* Par MM. BARTHEZ et RILLIET, 3e édition. T. I. et II. Paris, 1853; chez Germer Baillière.

Clinical and Practical Treatise on the Diseases of Children. By Drs. BARTHEZ and RILLIET.

This treatise is one of those which merit a long and careful analysis, or else a simple announcement of re-publication. It is *the* authority on the subject on which it treats; the inexhaustible source from which compilers in every language supply their works. We know of no systematic work of the present day which surpasses it in learning and scrupulous exactness. It has but one fault, perhaps; which is, that it represents too closely the results of hospital practice alone. The Children's Hospital at Paris is not a fair field for therapeutical experiment. Treatment is opposed by obstacles of all sorts; the crowded wards, the impossibility of excluding the elements of contagion, everything conspires against the advantageous influence of otherwise efficacious remedies.

Our authors were among the first to perceive that pathological anatomy was an insufficient basis for infantile pathology; as their circle of observation extended, they have considerably modified the opinions they at first entertained. In a manner most becoming in men of their

* See *Va. Med. and Surg. Journal*. P. 87, et seq. and p. 173.

We had determined to present our readers with a translation of the most important portions of these notes, but the Philadelphia publishers having engaged Dr. Bumstead to prepare the complete work, we concluded to occupy our pages with matter less generally accessible.

calibre, they avow what time and study have taught them to amend. The new preface is as interesting as a confession.

The manner in which we have treated our subject, say the authors, has brought upon us the reproach of being mere anatomists; we may now be blamed for devoting too much space to questions of doctrine and etiology. But we will reply that, as we have advanced, we have recognised, in common with many of our illustrious predecessors, that the autopsy is not the last word in medicine, and that the study of the dead body alone cannot furnish a clue to the phenomena of life. As years pass on, the horizon extends, the mind enlarges also, and we ask ourselves if anatomical prejudices have not often induced us to take the effect for the cause, the result of the affection for the affection itself.

At present, they continue, guided by the principle that nature is niggard in causes and prodigal in effects, we are convinced that numerous local diseases, according to reigning ideas, so clearly separate, are commonly only the result of a few general morbid conditions. French medicine is evidently tending in this direction, and, having acquired glory by throwing light upon the diseases of organs, it will illustrate its future progress by investigating general affections.

Such prolegomena indicate that the present edition is not a servile reproduction of those that have preceded it. Let us add that it treats of the diseases of early infancy, as M. Rilliet promised that it should in his article on "cholera infantum," which was published in these pages. This subject was heretofore excluded from the treatise, in consequence of the authors' observation having been limited to the Children's Hospital, where infants are not admitted.

We shall wait until the work is completed by the publication of the third volume, before giving such an analysis as the book and subject merit. In the mean time we beg leave to advise all of our readers who are interested in the subject, to procure and study this important treatise.

IV. *On the Treatment of Vesico-Vaginal Fistula.* By J. MARION SIMS, M. D., of New York, (late of Montgomery, Ala.) Pamphlet, pp. 28. Blanchard & Lea. 1853. (From the Author.)

This memoir, reprinted from the *Am. Journal of Med. Sciences*, shows us that the treatment of vesico-vaginal fistulæ has been successfully undertaken by several American surgeons. Dr. Hayward, of Boston, reported the first fortunate case in 1839. In 1851, he published two more cases of complete success, and five in which partial relief was procured. Dr. Pancoast, of Philadelphia, has also succeeded in two instances. In these cases, the borders of the fistulæ were pared and union was obtained by the ordinary interrupted suture. In 1847, Dr. Mettauer, of Virginia, described his operation with leaden sutures. The author of the memoir we are now analyzing describes at great length what he calls his new method; we have not perceived anything particularly new in it, therefore we shall glance very briefly at those particulars in which it differs from the common method.

In the first place, Dr. Sims places his patient upon her knees with the head and shoulders depressed. A speculum, remarkable for its concavity, is used to elevate the recto-vaginal septum, and gives a good view of the vaginal canal and uterine neck. Dr. Sims proceeds to refresh the edges of the fistula in the usual way, and then unites them by a method exclusively his own. The "clamp suture" is composed of several (usually three) fine annealed silver wires, fastened to cross-bars. The wires being tightened, the tissues embraced between the cross-bars are brought into close apposition. The author does not explain how his *modification* differs from the quilled suture. What still farther characterizes the procedure of this surgeon, is the employment of a catheter designed to be a self-retaining instrument. We saw it used once, an instrument modelled from the drawing presented by the author. It did not come out, it is true, but it did worse, *it went in*.

The method of M. Jobert was a true advance in the treatment of the distressing infirmity which we have under consideration. The French surgeon divided the tissues which united the fundus of the bladder to the neck of the uterus, and thus obtained sufficient relaxation to allow of reunion. M. Maisonneuve went farther, and divided the attachments of the urethra to the pubes, thus loosening the anterior border of the fistula. Even with this new principle introduced into the operation, success is by no means uniform or complete. Probably no living operator equals Jobert in autoplasmic surgery, and yet we have seen him fail repeatedly, and in his most successful cases, the bladder rarely resumed its functions even partially.

We are therefore compelled to believe that the operation for vesico-vaginal fistula will continue to be attended by frequent failures, notwithstanding the most complex instruments, and the most ingenious postures and sutures, and finally, that the article of Dr. Sims is utterly worthless, for after waiting for nearly two years for the publication of those "individual cases, which will prove the curability of this disease," as promised by the author, instead of a loyal and candid description of his successes and reverses, we receive his old paper, with a preface announcing that he has opened a private dispensary in New York, for the "treatment of the accidents of parturition."

V. *Transactions of the Medical Society of the State of Pennsylvania at its Annual Session, May 1853.* Philadelphia, 8vo., pp. 127. (From the Society.)

This volume contains the minutes of the annual meeting of the Pennsylvania State Medical Society, an address by the President, the reports of twelve county societies, and a paper on small-pox and vaccination.

In the first of these divisions we find an account of the business transactions of the Society, and the proposal of two measures calculated to increase the usefulness of the association. The first has reference to an analysis of the drugs sold in the State. The county societies are invited to collect samples of important medicinal agents from

the dealers and manufacturers in their respective districts, which samples are to be placed in the hands of a competent assayer, appointed by the State Society, who will report upon their purity and quality. The second proposition contemplates an investigation of epidemics with reference to the different geological formations over which they prevail. The associate societies are requested to furnish topographical histories of their several counties accompanied by charts, and to record carefully any facts calculated to show how far epidemic and other diseases are influenced by geological causes.

The reports of county societies show that in Pennsylvania "the past season (1852) has been one of unusual health," there having been "but little disease comparatively with other years." P. 63.

The sanitary committee of the Medical Society of Reading and Berks county, notice only a few cases of typhoid fever, but "in other diseases, a marked tendency to a typhoid state, with frequent occurrence of hæmorrhage from the nose, fauces, lungs and bowels." Furunculoid affections were also common, and "diphtheritic inflammation of the soft palate and pharynx." The reporter, Dr. Gries, treated typhoid fever with sulphuric acid, and considered "Dr. Todd's doctrine, that it is better to over-stimulate than under-stimulate, monstrous."

Dr. Edge, of Chester county, adduces instances in which typhoid fever appeared to him to be propagated by contagion.

Dr. Carpenter, of Schuylkill county, refers to the great prevalence of cerebro-spinal meningitis in his locality. Most of the cases proved fatal. "In those which recovered, it seemed to me that blisters to the extremities produced the most marked benefit," p. 60. In Pottsville they treat scarlatina with inunction, and hydrochloric acid as a drink. The reporter mentions two cases of strangulated hernia, in which chloroform was administered preparatory to an operation, but, when the tumour was touched, before commencing the incisions, reduction occurred almost spontaneously. A *map of altitudes* accompanies this report, and the reporter speaks of the influence of altitudes in modifying diseases as a subject of great importance, but the only information that he gives us on the subject is, that he has "come to the conclusion that, within certain limits, a high locality, with its consequent rarefied atmosphere, is conducive to a healthy state of the lungs, as well as to an expansion of the chest, and an increased capacity for inhalation," which leads us to the conclusion that the reporter has not very thoroughly explored the subject he commends to the consideration of others.

The report of Lancaster county adds very little to our knowledge of any disease, except nostalgia perhaps; the reporter's morbid affection for his own soil being apparently an example of this affection. We are furnished with innumerable topographical details and brilliant descriptions of the "Garden of America," as the reporter designates Lancaster, and are enabled to admire its extended territory in a highly coloured map.

The committee of Blair county inform us that, in all the epidemics of their section, "there is a powerful tendency to recovery." The inflammatory affections, however, are less accommodating, and will

brook no delay in treatment. The committee discuss the question of the contagiousness of typhoid fever, without bringing any new facts to bear upon it, and denounce the use of mercury as an alterative in this disease in a strain which would do credit to a western stump orator.

The committee appointed to prepare a "sanitary report of the county of Mifflin," acquit themselves of this duty by giving a simple enumeration of the diseases which have "appeared occasionally," and then expressing "their deliberate conviction, that calomel is still too indiscriminately, injudiciously and empirically prescribed by regular practitioners." The celebrated Mr. Pott once said that "every man might give an opinion, but it was not every one who was qualified to collate and arrange facts." We would advise the committee, if they have no opinions to advance of greater merit or novelty than this, to confine themselves, in future, to the more useful, though less easy, task of discharging the duties assigned to them.

In Susquehanna county, scarlatina prevailed, and some of the cases were unusually severe, "requiring, say the committee, the early use of the lancet, and subsequently the warm bath. The majority of these cases had a fatal termination," which, considering the treatment, was, we think, very natural.

In Montgomery county, Dr. Paley encountered many cases of scarlatina, and was struck with the efficacy of gargles of nitrate of silver in solution and cold affusion. Six out of his nine fatal cases "were affected with erysipelas at the same time, proving conclusively that two general and distinct diseases may exist in the system and run their courses simultaneously."

The report of Bucks county contains a very interesting description of an epidemic of *diphtheritis*, by Dr. Samuel Thomson. The disease had not prevailed previously in that locality; Dr. T. and his colleagues were much puzzled by it, and their treatment by emetics and cathartics proved very unsuccessful. Dr. Thomson had an opportunity of observing more than 100 cases, and soon found that the best treatment consisted of the local application of caustic, and the administration of half-grain doses of mercury until a decided mercurial impression was produced.

Dr. Trego, of the same county, describes a disease which "went by the name of typhoid fever." He repeats Professor Wood's commendations of the oil of turpentine, and assures us that, in typhoid fever, "the glands of Peyer will be ulcerated, as will be indicated by the deep cross-bar figures in the middle of the tongue;" but, as Dr. Trego appears to indulge more in diagnosis than in autopsies, we do not know that his correlations are entitled to much credit.

Dr. Gemmill's brief paper on small-pox and vaccination, relates some observations and experiments on this subject, from which he concludes that the protective power of vaccination is lost in the lapse of time, and infers that universal re-vaccination after the age of puberty is most important. His inferences and conclusions are not warranted by his observations and experiments.

The address of Dr. Corson, President of the Society, is a bad speci-

men of a species of compositions which are very rarely edifying. It abounds with abortive efforts at eloquent rhetorical flights, and the matter is worse than the manner. Dr. Corson objects to the requirements for preliminary education in medical students, recommended by the American Medical Association, because Franklin did not know Latin and Greek at first, and Dr. Corson fears that the harsh exactions of the Association may exclude from medicine some intellect as great as Franklin. It is said that Harvey after reading Virgil, would throw away the volume in an ecstasy, exclaiming that "the book had a devil in it." Dr. Corson and those that think like him, would also throw away the book, not from any fear of the devil, but from a well-founded horror of hexameters. The President passes from this subject to the abuse of mercurials, and shows great industry in rescuing from oblivion the names and opinions of various Smiths and Johnsons, who believe that calomel is injurious in typhoid fever, dysentery, and cholera. He seems to desire to erase mercury from the *cadre* altogether, thinks that chemistry will yet furnish us with a safe substitute for it, and gravely proposes an investigation to determine "whether there are any diseases to the cure of which mercury is absolutely essential."

We come now to a temperance lecture :

"Were I a professor of midwifery, says Dr. Corson, or of the practice of medicine, and believed brandy essential to the treatment of a single malady, I would appoint a solemn fast-day on which to address my class. I would clothe the hall with the drapery of woe; would attire myself in mourning, and, invoking the presence of genius degraded; of female loveliness and virtue deformed and outraged; of parental and filial affection turned into bitter and burning hate by the use of intoxicating drinks; would in the mournful accents of grief, discourse to my pupils on the darkness of the nineteenth century, which had, in this single case, furnished no substitute for that agent, which has filled the world with disease, sorrow, and premature death." P. 39.

We confess to an intolerance for cant of this sort. We are glad that Dr. Corson is *not* "a professor of the practice of medicine," and has not the opportunity of bringing ridicule upon himself and his profession by an absurd theatrical show. Doctrines like his, which denounce alcoholic drinks as poisonous, "are at variance with reason, and unsupported by medical science, else keenly alive to the evils of intemperance," as Dr. Theophilus Thomson has justly remarked. It is the restrictions which such men place upon wholesome wines and ales, that consign the artizan and labourer, fainting unrefreshed over their heavy toil, to pot-house orgies. The privation, unhappily, is a premium, at once direct and indirect, upon excess. Wine, irrespective of its cheerful natural solace, is admirable as a restorative in and after fevers, and those states of exhaustion to which multitudes in this anxious, striving existence, are liable. The real seat of temperance is the soul. Amend men's habits, increase their comforts, enhance their moral and intellectual enjoyments, and we oppose an unassailable barrier to the dram-bottle. Nothing except the general improvement of their nature, as Channing avers, can fortify the poor against excesses which make

them scourges alike to themselves and their race. He would conciliate their self-respect, "the loss of which is their chief peril—the chief peril, indeed, of us all."

As some compensation for Dr. Corson's ineptitudes, we will present our readers with the opinion of Dr. M'Cormac, of Belfast, who has written a work* on moral-sanatory economy, abounding in learned facts drawn from the rich store of the author's mind, and conceived in the true philosophic spirit of good-will and charity towards man.

"Light, unadulterated wines and ales, refresh but do not intoxicate. Why should there not be a flask of wine, or a jug of ale, on every poor man's table, to the solace of the toil-worn artizan and labourer, the child-nurturing mother? If intemperance has slain its myriads, the absence of the temperate use of wines and ales, coupled with material destitution and decay, has also destroyed myriads. There are multitudes, as every medical man is well aware, in whom the healthful solace of pure vinous drinks, in conjunction with adequate solid nourishment, would arrest the else certain progress of disease and death. Those who so erroneously, although conscientiously, insist on the total disuse of wine, should peruse Krumacher's 51st Parable on the grape, *Der Wein, Essen*, 1850. 'As a refreshment, when the vital powers are exhausted, a protection against transitory organic disturbances, wine is surpassed by no product of nature or art.' *Liebig's Letters*, p. 445."

We will not waste the time of our readers by a farther examination of this address, which is an illustration of the converse of Mr. Abernethy's proposition, that "increase of knowledge was like no other growth, but was often attended by a shrinking in the bulk," exhibiting as it does, by occupying seventeen large and closely printed pages in the development of two or three erroneous ideas, the fact that retrograde progress in knowledge may be attended by the most tumid bulkiness.

The *Transactions* are well printed and well illustrated, and indicate that the State Medical Society of Pennsylvania is in an efficient and prosperous condition.

VI. *The Medical Formulary*. By BENJAMIN ELLIS, late Professor of Pharmacy and Materia Medica, etc. Tenth edition, revised and much extended, by R. P. THOMAS, M. D. Philadelphia: Blanchard & Lea. 8vo., pp. 296.

This new edition of a work, more popular in this country than any of its kind, is published in handsome style.

The editor has made numerous additions, especially in the sections devoted to external remedies. Perhaps the utility of recapitulating the various degrees of strength in which different authors have recommended solutions of caustic and preparations of zinc, may be questioned by those who are disposed to be critical.

The work constitutes a convenient book of reference, and we doubt

* *Moral-sanatory Economy*. By Henry M'Cormac, M. D., Consulting Physician to the Belfast General Hospital, &c. Belfast: 1853. 8vo., pp. 150.

not that it will continue in general use. We would prefer that the matter should be printed in smaller type and embraced in a smaller compass. For a formulary, an octavo is of objectionable bulk.

VII. *Letters on Syphilis*. By PH. RICORD. Translated from the French, with an Analysis of the above letters, by D. D. SLADE, M. D., M. M. M. S., etc., etc., etc. Post-octavo, pp. 404. David Clapp. Boston, 1853. (From the Author.)

This, we believe, is the fifth translation of these letters which has been made in this country. It is to be presumed therefore that the work is a popular one, and since the public is not weary of it, the critic should not murmur at its frequent claims upon his attention. We have already fully discussed the matter contained in the work, and on this and all future occasions, we shall confine our remarks to the manner in which it is brought out.

The present is certainly the best printed copy of the *letters* which we have seen. The form is convenient, the paper is elegant, the typographical execution is unexceptionable.

Inasmuch as Dr. Slade had undertaken to interpret a work, of which the profession already possessed four versions, we expected to find an almost faultless translation. We regret to say that, so far as a cursory examination will enable us to judge, this does not seem to be the case.

On the first page we find Dr. Slade unable to discover a paraphrase for *spirituel* or *esprit*, and Dr. Amedée Latour "bewildered" by honour. On the second page, we have "had doubted" for *had suspected*, "grains" for *cereals*, and "without this *bagage* so respectable," for *without this decent luggage*. Farther on, "repression" is put for *suppression*; the author speaks of "distorted mental vision," Dr. Slade renders: "an intellectual squint-eyed person," and immediately afterwards speaks of *visual* strabismus, instead of *ocular* strabismus. A few paragraphs farther on, we have a literal translation of Latour's blasphemous witticism, denominating Ricord "the St. John forerunner of syphilism." If our American ears must needs listen to such jests, we should at least like to have them grammatical. Dr. Slade does not get through this paragraph without a "*naïf* avowal," for which we think *ingenuous* avowal would have done quite as well.

We have heard of doctrines being lost in oblivion, but Dr. Slade describes them as "extinguished in forgetfulness." He next speaks of "*fervent* readers," an epithet which we conceive to be appropriate to such readers only as can get through with his book. We turn over another page in order to meet with "met now" instead of "meets now;" and "exhibited a criticism," which is worse, if anything, than "exhibited a medicine," for the latter Boeotianism has been established by custom. Cullerier the elder is called "Cullerier the ancient." The author makes the tarantula sting, (*piquer*,) Dr. Slade with greater entomological accuracy makes it "bite;" but then, in order to show that he has a lively imagination as well as scientific knowledge, he

speaks of Ricord's "coloured sayings," (p. xvi.,) and science being "*paved* with misunderstood geniuses," which is certainly rather a strong metaphor.

All these errors, and many more possibly, for the work comes to us at the last moment, and we can little more than glance at it, occur in the first eight pages of the introduction.

The subsequent portions of the performance may be more creditable; doubtless Dr. Slade learns as he goes along; we notice however that the pages are plentifully sprinkled with French words. We hope that if his book reaches a second edition, Dr. Slade will correct these faults. Surely, without obscuring his author's meaning, he could render "*échorchure*" by "abrasion" or "excoriation," "*verole*" by "pox or syphilis," "*œno-phagedenique*" by "oino-phagedenic," "*echauffement*" by "irritation or inflammation," "*syphilis d'emblée*" by "syphilis without any initial local lesion," and "*accuminés*" by "accuminated," or else "pointed and prominent." Dr. Slade may understand these French terms, but in undertaking to interpret to those who do not, we conceive that he is bound to find some English substitutes for them.

Dr. Slade has not borne in mind that it is not a translator's business to give a servile copy of his original. In one place, Ricord, not liking to contradict flatly the assertions of Cazenave, Gibert and the other observers of the Hospital St. Louis, (located on the northern side of the Seine,) playfully replies that things may take place as they affirm on their side of the river, but that at his hospital it is different. Dr. Slade by translating "*on the other side of the water*," would lead those unacquainted with the expression by which the inhabitants of the dreary Latin quarter refer to the joyous regions on the north bank of the Seine, to suppose that Ricord was alluding to America.

The work concludes with an "appendix of formulæ of the *hôpital du Midi*," in which we find an agreeable confusion of Latin, French and English terms. Even admitting that all his readers were aware that *extrait Thebaïque* and *eau de laitue* were synonymes for aqueous extract of opium and lettuce-water, we cannot see why Dr. Slade should insert these expressions into Latin formulæ.

We have not spoken of an abstract of Ricord's clinical lectures, or of an "analysis of the letters," which are also contained in the book. We shall examine these, and if they contain anything of importance, to use the translator's expression, "we shall pre-occupy" ourselves with them on a future occasion.

VIII. *Transactions of the American Medical Association*. Vol. VI. Printed for the Association. Philadelphia. 1853. Octavo, pp. 869. (From the Association).

The present volume of *Transactions* is in many respects a valuable one. It contains: the minutes of the last meeting of the Association; financial reports; Dr. Wellford's address; reports on medical educa-

tion and literature ; a number of papers on medical and surgical subjects, and two prize essays.

Dr. Meigs' paper on acute and chronic diseases of the neck of the uterus is a prominent feature ; it is adorned with resplendent lithographs, in which the poor cervix is represented of every possible form, and of all the colours of the rainbow. We doubt not it will lend a new impulse to the utero-mania which is already sufficiently prevalent.

The most valuable papers are those of Dr. Gross on the results of surgical operations in malignant diseases, of Dr. Burnett on the cell doctrine, and of Dr. Buck on morbid growths within the larynx. We shall examine these and the other contents of the volume on a future occasion.

Copies of the work may be obtained by forwarding five dollars to Dr. Condie, of Philadelphia, chairman of the committee of publication.

IX. *Lectures on Surgical Pathology.* By JAMES PAGET, F. R. S. 8vo. pp. 699. Philadelphia : Lindsay & Blakiston. 1854. (From the publishers.)

On the present occasion we can only announce the publication of this admirable treatise. It is too valuable a work to be dismissed with a brief notice ; we are therefore compelled to defer to a future number an analysis in some measure commensurate with its importance.

X. *Memoirs of John Abernethy, F. R. S. With a view of his Writings, Lectures, and Character.* By GEORGE MACILWAIN, F. R. C. S. 12mo. New York : Harper & Brothers.

This is a work of high professional and general interest. Mr. Macilwain was a pupil of the celebrated surgeon whose life he has undertaken to depict ; he shows a love for his subject, and is thoroughly acquainted with it ; he has presented us with an instructive and entertaining piece of biography.

Who is not familiar with the doctrines of this most illustrious of the pupils of Hunter ? Who has not read the "Constitutional Treatment of Local Diseases," and been beguiled by the great lecturer's tempting theories, and heard of his traditional jokes and quaint sayings, and his contempt of "the Doctors," and of his quackish ways, with his blue pill and black draught, which "ultimately formed a nostrum with him ?" All who have, and all who have not, will derive a rich fund of amusement and information from this memoir, which we heartily recommend to the notice of the Profession.

The work may be obtained of Mr. A. Morris.

XI. *Hufeland's Art of Prolonging Life.* Edited by ERASMUS WILSON, F. R. S. Post-octavo, pp. 328. Boston : Ticknor, Read & Fields. 1854. (From J. Woodhouse).

This is a translation of a work by a physician of the University of

Zena, which has long enjoyed a deserved popularity in Germany. It first appeared in English in 1794. The voluminous form in which it was published effectually prohibited its wide diffusion.

The work is now reproduced in a convenient and attractive form by the Boston Publishers. It is calculated, we think, to fill a vacant niche in popular literature, and to be eminently useful in diffusing a knowledge of the conditions which modify our physical existence. It is not occupied with dietetic rules and those hygienic measures by which life is preserved; the author regards the *macrobiotic* science, or the art of prolonging life, as quite distinct from this. The object of the medical art is health, that of the macrobiotic, long life. Both the professional and non-professional reader may read Hufeland's exposition of macrobiology with interest and instruction.

The work, which is gotten up in excellent style, may be procured of Mr. James Woodhouse.

MISCELLANEOUS.

ENGLISH WORKS RECENTLY PUBLISHED.

- Principles of Surgery. By James Miller. 3d edition, 240 illustrations. Edinburgh: A. & C. Black. 16s.
- Memoirs of John Abernethy. 2 vols., oct. London: Hurst & Blackett. 21s.
- Valentin's Text-book of Physiology. Translated by Brinton. 500 engravings. London: Renshaw. 25s.
- Quain on Diseases of the Rectum. Post-octavo; lithographic plates. London: Walton & Maberly.
- Brande's Manual of Chemistry. Sixth edition. London: Parker. 2 vols. £2. 5s.
- Copland on the Causes, Nature and Treatment of Palsy and Apoplexy. By James Copland, F. R. S. London: Longmans. 8vo. 10s. 6d.
- Clinical Lectures on Paralysis and other Nervous Affections. By R. B. Todd, F. R. S. Post-octavo. Churchill: London.
- Swan's New Plates of the Brain. London: Longmans. 1 vol., 4to. 21s.
- Elements of Psychological Medicine. By Daniel Noble. Churchill. Post-octavo. 7s. 6d.

THE FOLLOWING WORKS ARE ANNOUNCED:

- Pathological and Surgical Observations. By Henry Lee, F. R. C. S. 8vo. Churchill.
- Practical Researches on Diseases of the Uterus. By T. Snow Beck, F. R. S. 8vo. Churchill.
- A Manual of Pathological Anatomy. By C. Handfield Jones, F. R. S., and Dr. Sieveking. Foolscap-octavo.
- The Microscope and its Revelations. By Professor Carpenter.
- Diseases of the Heart and Aorta. By Dr. William Stokes, of Dublin. Hodges & Smith: Dublin. One large volume. 8vo.

The N. Y. Medical Times publishes the following resolution, at the request of E. L. Beadle, M. D., Secretary of the Am. Med. Association, and requests the medical press to extend its publicity:

"Resolved, That this Association earnestly recommends to the local Societies in different portions of our country, to appoint Committees, whose duty it shall be to record the prevalence of epidemics, or other diseases, and the general state of health in their respective localities, and to transmit said reports to the Committees of this Society on Epidemics, through the State Societies where they exist."

At the last meeting of the Medico-Chirurgical Society of Richmond, this commendation was read, and in accordance with it, Dr. Wm. Parker was appointed to collect information on the subjects to which it refers, and to communicate the same to Dr. Peebles, Chairman of the Committee on Epidemics, for Virginia and North Carolina.

The last meeting of the Medico-Chirurgical Society of Richmond, being the annual meeting, was occupied in the election of officers for the ensuing year. The Society is now organized as follows:

President, Dr. John A. Cunningham; Vice-Presidents, Drs. Snead and Gooch; Treasurer, Dr. Little; Corresponding Secretary, Dr. Hill; Recording Secretary, Dr. Otis; Librarian, Dr. Trent.

The annual assessment was fixed at six dollars and a half.

The following is a list of the members of this Society: Drs. Beale, Bolton, R. G. Cabell, R. H. Cabell, P. H. Cabell, Cunningham, Deane, John Dove, John Dove, Jr., James Dove, Mills, Gooch, Merritt, McCaw, Taylor, Palmer, Haskins, Pollard, Otis, Gibson, T. Johnson, C. Johnson, Hill, Parker, Peticolas, Lewis, Conway, Trent, Burton, Roddey, Scott, Snead, Coxe, Hancock, Broocks, Marx, Rawlings, Little, W. Carter, W. Wilson, G. A. Wilson, H. Thomas, Higginbotham, Pleasants.

TO READERS AND CORRESPONDENTS.

The next number of this Journal will be published on January 1st, 1854. Communications for that number have been received from Marshall Hall, F. R. S., Dr. C. P. Johnson, Dr. Wm. A. Patteson, and Dr. T. P. Mayo.

Those of our subscribers who have not yet paid for the Journal, will receive their bills with the present number. In future their accounts will be rendered regularly at the conclusion of the first volume for each year. It is essential to the prosperity and usefulness of the work that its dues should be collected with punctuality. We hope therefore that our demands will be responded to with promptness.

The numbers of the Memphis Medical Recorder, N. O. Medical Register, Western Medico-chirurgical Journal, and some others of our exchanges do not arrive with regularity. Unless this fault is remedied, we shall be compelled to erase these journals from our exchange list.

We have received the following additional works:

A Pentaglot Dictionary of the Terms employed in Anatomy, Pathology, Practical Medicine, etc., with the leading Term in French, followed by the Synonymes in the Greek, Latin, German, and English. By SHIRLEY PALMER, M. D. (From J. W. Randolph).

An Introductory Address. By WILLIAM M. MACPHEETERS, M. D., St. Louis. (From the author.)

Traite Pratique des Maladies des Yeux. Par A. SCARPA, traduit de l'italien, par J. B. Leveille. (From H. Bailliere).

Handy's Text-Book of Anatomy. Octavo. pp. 810. Phila.: Lindsay and Blakiston. 1854. (From the Publishers.)

THE
VIRGINIA
MEDICAL AND SURGICAL JOURNAL
FOR JANUARY 1854.

ART. I.—*The Spinal System ; A Demonstration and Lecture given at the Medical College, Richmond, Va.* By MARSHALL HALL, M. D., F. R. S., etc.

In the following demonstration and lecture, I propose to pass in rapid review the experimental facts, the physiology, the pathology, and the therapeutics of the *spinal system*.

I fear the multitude of topics which I have to treat may occupy your time inconveniently, I shall therefore hasten to bring them before you without further preface, and shall dismiss them in turn with but a brief commentary.

You will, I think, immediately perceive their vast importance both in the science and in the practice of medicine.

1. *Experiments*.—I have, in this terrapin (*Testudo græca*), divided the spinal marrow immediately below the occiput. I have, therefore, entirely separated the cerebrum, or centre of the cerebral system, from the spinal marrow, or centre of the spinal system.

You will soon be convinced that the term cerebro-spinal is a misnomer, combining in one two systems perfectly and utterly distinct.

Observe this animal: it has a painful wound in the neck, if it were susceptible of pain, and would, therefore, not remain motionless, if, with sensibility, it possessed volition or the will to move. Yet it is utterly motionless, and, if untouched, would continue thus until life was extinct.

The cerebrum being removed, all spontaneous motion is annihilated. Nevertheless the power to move remains; it is volition which, with the

cerebrum, has been removed. Observe the effect of the stimulus I now apply : I touch the integument near the sphincter cloacæ with the forceps; the two inferior extremities and the tail are immediately excited into energetic movement.

There is neither sensibility nor volition ; consequently no voluntary, no spontaneous motion. But you observe how lively are the movements excited by external excitation. Nay, these movements are not only lively, but so similar to voluntary movements as to have beguiled physiologists into the error of supposing that sensation and volition are still present in the decapitated animal. This error was committed by Legallois, and is still maintained by Dr. Dowler of New Orleans.

But we may place this animal in a position which would be most painful if sensibility really remained ; and would certainly not be retained if volition persisted, yet it remains unmoved, and, if sketched by a pencil, the animal would be found to have preserved its form and position unmoved until life departed.

From this second terrapin, after dividing the nervous centres exactly between the cerebrum and medulla oblongata, I have removed all the viscera. The phenomena are still the same : the same movements of the extremities are excited : the same appearance of design in their movements. The border of the glottis, that of the pharynx, that of the cloaca, are especially very excitable. An act of respiration is excited in the head on touching the eye, or eye-lid, or the nostril ; but here it may be that sensation and volition remain.

In this eviscerated animal nothing then remains but the spinal system ; the cerebral, and the ganglionic systems are removed ; the spinal system is isolated, the medulla oblongata being instant, and its relation to the laryngeal, sub-maxillary, and respiratory apparatus, the pharynx and the cloaca, preserved. There can be no muscular movement without a stimulus. In this and the former experiment the internal stimulus of volition is extinct. External stimuli alone are operative and efficacious. Of these the rubbing of the integuments between the thumb and finger, the pinching of the forceps, the puncture of a probe, heat and cold are the most remarkable in their effects.

I have now to show you an interesting fact or experiment : if I irritate the upper portion of the spinal marrow at its division, I immediately induce muscular movement in all the limbs. If I were to lay bare a muscular nerve and irritate it, I should induce muscular contractions in all the muscles to which that nerve supplied branches. This

effect is direct; that is, from above downwards, or from within outwards; and it is alleged by Haller, Bichat, Prof. Müller, and I believe all physiologists, to be the only direction in which this nervous power acts. To my own experiments we owe the discovery of this new mode of its action—reflex, retrograde, from below upwards, and from within outwards. When I irritate the foot of the posterior extremity in this terrapin, you observe all the limbs are moved, just as in the experiment of irritating the upper portion of the spinal marrow. If I irritate the denuded intercostal nerve, or the lower portion of the spinal marrow, the same phenomena occurs; the conclusion is obvious.

Before I leave this topic, I must beg your attention to the multiplicity of the actions induced: Not the limb irritated only, but all the limbs, and the tail move; in the case in which the division is carefully made precisely at the point between the cerebrum and medulla oblongata so as not to injure the latter, an act of inspiration is frequently induced.

There is also another point to which I must draw your attention: These actions are frequently concatenated into distinct acts; in the frog prepared in the manner of this eviscerated terrapin, if we irritate the foot it frequently performs the compound act of leaping; propulsion and retraction following each other. The same compound act is observed in sneezing and coughing, sudden inspiration being linked with forcible expiration. I believe that in ordinary respiration the two acts of inspiration and expiration are equally and essentially excited and linked together, an interesting fact which explains many physiological and pathological phenomena into which time does not permit me to enter. I must now turn to the second topic of this lecture.

2. *The Anatomy of the Spinal System*.—Each of the phenomena which have been described, is effected by a nervous influence, the *vis nervosa* of Haller, passing along and through a certain *nervous arc*, which, because it passes and acts through the spinal marrow, I have designated *diastaltic*. This is a fact entirely new in anatomy, and of vast importance in physiology.

The origin of this arc is in the integument, the mucous membrane, or other tissues; its course is, first along nerves *to* the spinal marrow, where it is *reflected* along other nerves *from* the spinal centre, and lastly, to its destination in the muscles.

It may be destroyed in any part of this course: I have removed the integument from one foot in this terrapin; the foot is no longer excitable by the touch of the probe, as the undenuded foot has been observed to be.

This fact is still more obvious in the frog. The same effect is produced by dividing either the eisodic or in-going, or exodic or out-going nerves of which I have spoken; or, lastly, by removing the annexed portion of the spinal marrow.

Thus a new kind of anatomy is demonstrated physiologically. It may be proved anatcmically by laying bare the intra-spinal roots of the spinal nerves, and dividing the posterior or eisodic root, and the anterior or exodic root, in separate experiments.

There are in these experiments, as in those in reference to sensation, some slight residuary phenomena, of which I cannot treat particularly.

3. *The Physiology of the Spinal System.*—The physiology of the spinal system embraces all the acts of ingestion, of egestion and expulsion, and of exclusion and retention in the animal economy. Deglutition, the all important act of respiration, defecation, the acts of generation in both sexes, all, all depend upon the spinal system.

And not one of these functions were understood previous to the detection and development of this system. And not one is noticed in this relation by Redi, or Unzer, or Prochaska, or any other of the numerous authors who have been disinterred, and quoted as having anticipated me in this discovery. Certain experimental phenomena were known to them; the relation of these phenomena to the spinal marrow had been noticed by Whytt; the morbid actions of sneezing and coughing had been associated with them; but not one function, of all those which I have enumerated as specially linked with the spinal system, had been so, or at all, explained. There were disputes as to whether respiration be voluntary or involuntary, and those who concluded that it is involuntary, have left no rational explanation of its nature. In a word, physiologists had not made, but *missed* the discovery of the spinal system.

There is one function of egestion or expulsion to which I must advert emphatically. It is that of the expulsion of the foetus—parturition. This, like all other acts of expulsion, is a *spinal* act. It is modified, accelerated, or retarded by agents whose influence is exerted through the spinal system. In one word, the whole *art of obstetrics* reposes on the foundation of the spinal system as its essential basis!

I must not leave this subject without referring you to the work of Dr. Tyler Smith, written at my instigation, but hasten to other topics.

4. *The Pathology of the Spinal System.*—As in speaking of the physiology of the spinal system, I began by an expansive generaliza-

tion, that it includes all the acts of ingestion and of egestion, so I must now present you with a generalization in regard to the pathology of this system : the spinal system, then, is the *seat of all convulsive diseases*.

Uneasy sensations, abnormal perceptions, delirium, coma, etc., may occur without involving the spinal system ; they are morbid phenomena of the cerebral system. But the instant we observe spasm, or convulsion, or morbid contraction of muscles of any kind, we have to do with the spinal system. In this manner an accurate knowledge of the phenomena of the spinal system, becomes in the mind of the physician in regard to the diagnosis of the diseases of the nervous system, at least what the stethoscope is, in his hand and applied to the ear, to the diagnosis of diseases within the thorax. Epilepsy, tetanus, hydrophobia, are only to be investigated and understood by the physician who is adequately imbued with a knowledge of the anatomy and physiology of the spinal system. Not many years ago Esquirol, the authority on one of these topics in France, observed :

“Les symptômes de l'épilepsie sont tellement extraordinaires, tellement au-dessus de toute explication physiologique ; les causes organiques de cette maladie sont tellement inconnues, que les anciens ont cru qu'elle dépendait des courroux des dieux.”* I now venture to affirm that no disease is better understood, in its physiology and pathology, since the detection and application of the spinal system, than this same epilepsy ; that all epilepsy consists in fact, of direct, or reflex, spinal action and its effects.

I cannot prosecute this topic at present ; but I hope to do so to-morrow evening, when I am to have the honor of addressing the profession at the rooms of the Medical Society of Virginia. On that occasion I propose to enter upon it at length.

I will only now add that tetanus, which is a nerve disease, and hydrophobia, which is a blood disease, are equally intelligible and explicable on the principle of the spinal system. In both cases, as indeed in epilepsy, there is undue excitability of the spinal centre ; in both, or rather in all three, the phenomena consists in morbid direct and reflex actions, and their effects.

These actions and their effects are spinally seated in the organs immediately under the influence of the spinal system ; in the orifices, and exits of the animal frame, and the muscles which are the agents of

* *Maladies Mentales*. T. i., p. 274.

ingestion and egestion, of exclusion and retention; and therefore,—and most formidably—in the larynx. Hence the phenomena of laryngismus, the importance of which is becoming so well understood, and hence the importance of that simple remedy against its terrible effects produced by tracheotomy.

5. *The Therapeutics of the Spinal System.*—All those physical agents which act by inducing sudden effects on various organs of the economy act through the medium of the spinal system.

The effect of dashing cold water in the face in cases of asphyxia, the effect of a cold douche on the hypogastric region in that of inertia of the uterus and uterine hæmorrhage are of this kind. These influences act on eisodic nerves, and disastaltically through the spinal nervous arcs, on the muscular organs excited into contraction.

The principle of these actions has not been pointed out. That principle depends on two circumstances—*difference* and *alternation*.

Cold water dashed over a cold surface would produce no effect. It is the cold water dashed over a warm surface that is so efficacious.

When the face or the hypogastrium has become cold by repeated applications of cold water, continued dashing or douches are utterly inoperative. It is the *difference* of temperature which renders the remedy efficacious. In such a case the sudden application of *warmth* is the remedy.

This fact leads to another; it is the value of the alternation of heat and cold as an external spinal excitant. My lamented friend, Mr. Henry Smith, saved a child from an apparently hopeless state of asphyxia, after the usual remedies had failed, by plunging its body into a warm and cool bath alternately. It is to be regretted that the precise temperatures of these baths have not been recorded. But the *principle* is confirmed by the fact and experiment suggested.

Certain remedial and poisonous agents exert their influence in augmenting or diminishing the excitability itself of the spinal centre or of certain portions of it. Strychnia augments the spinal excitability, and especially that portion of it which acts on the larynx and pharynx, in an extreme degree. In a very minute dose it acts as a special spinal tonic. Cantharides and ergot are well known to act on the lower portion of the spinal centre, that portion which I would designate as the *medulla oblongata inferior*, and through it on the cervix vesicæ and on the uterus.

But I must hasten to a close. Allow me now to ask: What do you

think of the spinal system,—in its utter distinction and separation from the cerebral and ganglionic systems,—in its relations to experimental facts,—to anatomy, physiology, pathology, and therapeutics?

In speaking of experimental facts, I allude, of course, to those that are new; as to the rest, they are, I believe, entirely new. To me, I need not tell you, it is a thing of intense interest. I shall never forget the impression left on my mind by the phenomena which first suggested to me the train of investigations which has led to the discovery and establishment of this system. I had been examining the circulation in the lung of the triton; I had proceeded to separate the head and remove all sensation, and I had separated the tail. I touched this separated tail with the point of a probe; and it *moved*! I had not touched a nerve; I had not touched a muscle; I had only touched the external integument; and yet the tail moved! From that day to this I have never ceased to prosecute the enquiry suggested by this fact!—a fact which was to me as the valve in the vein to Harvey, suggesting the Circulation; as the rumour of the anti-variolaous efficacy of cow-pox to Jenner, suggesting Vaccination; all facts which had been long known, but which had remained unsuggestive.

Such is the usual course of *discovery*. It was known to all, since the time of Davy, that the inhalation of nitrous oxide would induce insensibility. It was to Horace Wells, an American, that this fact suggested the true and real discovery of *Anæsthesia*, and its recent applications to the arts of obstetrics and surgery!

I well know the opposition that this discovery excited. All discoveries, in *our science*, have done the same. Wells returned from Boston, after an experiment there, laughed to scorn. He was driven from his pursuit. Nevertheless he said to a gentleman of great ability and veracity, who communicated the words to me: "THERE IS A GREAT TRUTH IN THIS MATTER, AND THE WORLD WILL ACKNOWLEDGE IT ONE DAY!" His prophecy has proved true. It remains for a generous nation to reward,—not the author of this discovery, for he has quitted this scene of strife,—but those whom he has left behind, and who were dear to him, for this boon to suffering humanity.

ART. II.—*On a Case of Rigidity of the Os Uteri in which Hysterotomy was practiced.* By WILLIAM A. PATTESON, M. D., of Richmond, Va.

On Thursday morning, between midnight and daybreak of the 2nd of November 1848, I was asked to visit Mrs. G——, in childbed. I found her complaining of sharp pains, returning at regular intervals of 20 to 30 minutes. On an obstetrical examination, the wound was found high up, the os tinæ dilated to about the size of a dime, just admitting the end of the finger, very thin, and thrown more obliquely backwards towards the sacrum than usual, presenting an obliquity that I feared would prejudice its easy and regular dilatation, and I think, did so. The fundus of the womb was consequently more anterior than proper, and I made the patient during the larger part of the labour lie on her back, so as to favour a change, by position of body, in this position of the womb. This lady was 29 years of age, had been married about a year, and was now giving birth to her first child. I left her after the examination, and repeated my visit at 12 o'clock of the same day. On examining again, scarcely any change in the condition of parts was presented. The pains were more frequent. At 6 o'clock P. M., I repeated my visit and found her nearly as I had left her. It was now apparent she was to have a very tedious labour, but as it was uncomplicated with any disturbing circumstance, I directed her attendants to watch over her, and to send for me if the pains became more violent, or if any other thing creating apprehension should occur. I believed time and natural efforts would effect the delivery. About midnight I was summoned to visit her, and found her in very active labour. The os tinæ had then dilated to about the size of a dollar. I remained with her, and by the morning of the 3d (Friday), about 24 hours after my first visit, but probably 30 from the inception of labour, the dilatation had reached the size of the mouth of a common wine glass, and the membranes ruptured. Except the labour pains the lady was quite well. During the whole of Friday, with an occasional absence to visit some other, I remained with this patient; with continued and active labour through the whole day, there was but little advance in parturition. This was continued during the entire night of Friday, and by Saturday morning, the 4th, more than fifty hours from the beginning of labour, the diameter of the os tinæ was still not more than two

inches, and I became satisfied that it had not varied for the last 6 or 8 hours, during the most active and intense labour pains. It seemed to me it had reached its utmost point of dilatation; it embraced the vertex and protruding scalp like a tendinous ligament, and though thin, was as hard and tight during the pains as a piece of whip cord. During the past night there had been frequent vomiting, at which I was pleased, hoping it would favour relaxation. The pulse all the time was soft and entirely normal, and there was no indication of cure, other than the relaxation of the os tincæ. The general state of the system offered no inducement to deplete. The bowels had been occasionally emptied spontaneously.

Having become satisfied myself of the practice necessary to deliver her, I desired that my friend Dr. Haxall might visit her with me, and be present to assist me. My own view was that hysterotomy had become necessary, and that it was proper to make several sections of the girding os tincæ, and at once deliver with the forceps, by which manœuvre both mother and child might be saved. On his visit with me about 10 o'clock P. M., of Saturday, Nov. 4th, Dr. Haxall insisted that a farther delay should be had till 2 o'clock, P. M., and advised that the os be well smeared with ointment of belladonna, and if nothing was gained by that time, I had his concurrence in the practice proposed. The patient's pulse was now more rapid, and she was beginning to show symptoms of restlessness under her sufferings, and of exhaustion. I reluctantly consented to the delay in deference to the wish and opinion of Dr. Haxall. I had satisfied myself by the patient observation of the last 12 hours, that no more dilatation would ever be had, and I feared rupture of the womb or the tearing off of the cervix from the violence of the pains.

At 2 o'clock, P. M., Dr. H. joined me again, and the examination showed that nothing had been gained by the delay. We then proceeded to the operation, and with a keen blunt pointed bistoury, using the index finger of the left hand as a director, I made a free section of the os tincæ about half an inch or a little more in length just behind the symphysis pubis, and one of like kind opposite both the right and left acetabula. She scarcely felt the incisions, and complained of no pain from the operation, and as the parturient pains were violent, and the vulva not much dilated, it was thought best to delay the use of the forceps for a short time. In about 10, or at most 15 minutes, the head

of the foetus passed under the arch of the pubes, filled the hollow of the sacrum, and the perineal tumour was fully formed. The efforts were all so normal, that it was deemed unnecessary to have recourse to the forceps, the use of which we wished to save this lady, and in about 20 minutes more she was safely delivered of a full grown male child, who however was asphyxiated and lost. The cord, which was short, was very tightly coiled around its neck, and the circulation was entirely suspended. It was certainly living a few hours before the section of the womb. The limbs of the child were drawn up, and the muscles rigidly contracted. It required smart force to straighten out its legs and arms. All efforts to resuscitate it were unavailing. In about 15 minutes the wound contracted strongly, the secundines were thrown off, and the lady recovered as rapidly as if nothing untoward had happened, no bad symptom supervening. She is now living and in good health.

The enquiry naturally resulting from this case is, Ought not sections of the os to be more frequently made in cases of severe and protracted parturition when delay arises from this and similar causes? Will it not save the mother a vast amount of suffering without hazard, and the lives of many babes, who are still-born and lost from excessive delay in the passage of the head under the arch of the pubes? How often does the suggestion arise in the mind of the accoucheur in such cases, that a small section would permit its passage, when pain after pain fails to effect it, till the babe is destroyed by pressure and delay? How suggestive is the practice in cases of puerperal convulsion, where hasty and rapid delivery is indicated.

In the case detailed above it is certain that natural delivery never could have been effected.

ART. III.—*On a New Method of Determining the Quantity of Urea in the Urine.* By JOHN W. DRAPER, M. D., Professor of Chemistry and Physiology in the University of New York.

Much attention has of late been paid to the methods of determining the composition of the urine, it being very generally acknowledged, that if we possessed the means of a quick and accurate analysis of it,

we should be able to settle many contested questions, both in physiology and pathology.

Among the constituents of the urine, the nitrogenized bodies, urea and uric acid, are perhaps of the greatest interest, for they represent the waste which has taken place in the soft tissues generally. Accordingly from time to time new processes have been published for the estimation of these bodies, and more particularly of the first—urea. The methods recommended in the works on animal chemistry and organic analysis are, however, very far from satisfactory. Thus Simon, in his *Chemistry of Man*, effects the determination of the quantity of urea by forming the sparingly soluble nitrate, and Bowman, in his medical chemistry, resorts to the acetate, but both of these are very tedious and very disagreeable operations, and what is worse, uncertain in their results. Liebig has recently recommended the ternitrate of mercury, but the preparation of the test liquids is troublesome, and since the estimate eventually depends on the production of a particular tint or shade of a yellow colour, it cannot be exact.

There are however some simple methods which will give absolutely accurate results. These all depend on the principle, that urea and uric acid, when brought in contact with nitrous acid, undergo immediate decomposition with a brisk effervescence, owing to the escape of carbonic acid and nitrogen gas.

The quantity of these nitrogenized principles in the urine may be ascertained by determining the quantity of carbonic acid or of nitrogen thus set free, during the destructive decomposition of urea and uric acid by nitrous acid. Forty-four parts of carbonic acid, or twenty-eight of nitrogen, answer to sixty of urea.

One of these methods, which is extremely exact, I have recently described in the London and Edinburgh Philosophical Magazine. It is to conduct the disengaged carbonic acid into water of barytes, and weigh the resulting carbonate of barytes.

I have also, in examinations which I am constantly making of the urine, frequently resorted to the other plan of estimating the urea, from the quantity of nitrogen set free; and this I have done in two different ways: 1st, by determining the quantity of nitrogen by weight; or 2nd, by volume. The following is a more particular description of each of these.

A liquid suitable for the decomposition of urea is easily and economically prepared by taking a single cell of Groves' voltaic battery, and

placing strong nitric acid in the porous cup, and otherwise charging the cell in the usual way. After a few minutes the nitric acid turns green, becoming charged with nitrous acid. It is then to be decanted for use. If this liquid be poured into urine, filtered from its mucus, or into a solution of urea, a brisk effervescence sets in, and if a sufficient quantity of acid is used, so that red fumes are disengaged, the urea is totally decomposed, carbonic acid and nitrogen gases escaping.

In the first of the preceding methods, viz: That of determining the urea from the weight of the nitrogen, a known weight of urine (2 grammes), filtered from mucus, is placed in a bottle containing a tube filled with the nitroso-nitric acid above described; from the bottle a bent tube conducts the escaping gases through potash water, and then through a chloride of calcium tube. The operation is conducted in the manner well known in laboratories for the analysis of a carbonate, the loss of weight of the whole apparatus gives the quantity of nitrogen which has been set free. This operation requires about half an hour, and is quite exact.

In the second method, viz: That of determining the urea from the volume of the resulting nitrogen, the operation is essentially the same, only instead of letting the nitrogen escape into the air, it is received into a gasometer, and its quantity ascertained. As conducted in my laboratory, the amount of urea in a sample of urine may thus be determined in from ten to twelve minutes, and with certainty, to one thousandth part of the weight of the urine; a degree of exactness far beyond that of the old processes, and an expedition which at once recommends this method to the physiologist and pathologist.

ART. IV.—*Cases of Strangulated Crural Hernia, with Remarks.*
By FRANCIS H. DEANE, M. D., of Richmond, Va.

The following cases are reported as striking illustrations of the fact that the symptoms of strangulated hernia are by no means unequivocal in all cases,—that fatal constriction of the intestine may coincide with an almost entire absence of those well-marked features which are its usual accompaniments. They furnish additional proof of the propriety of not waiting until all the direful phenomena of

strangulation manifest themselves, before proceeding to relieve by an operation a lesion which, it is to be apprehended, will cause them sooner or later, in those cases in which irreducible hernial protusion is attended by obstinate constipation.

In one of the cases which I shall detail, the appearances indicated an affection quite distinct from hernia, and did not warrant a certain diagnosis until it was too late to apply the remedy. In the other, the symptoms were perfectly explicable without supposing the existence of strangulation.

CASE I.—Some seven or eight years ago, B——, 65 years of age, a man of robust and somewhat plethoric appearance, of regular habits, who had enjoyed uninterrupted health during his whole life almost, was seized with severe pain in a small tumour in the left groin. He had been cognizant of the existence of this tumour from early boyhood, but had never before experienced the slightest pain in it. He had not been guilty during the day of any irregularity in diet, or indulged in any unusual exercise, and never felt better in his life than he did a few minutes before the pain seized him. A short time afterwards, he vomited, experienced sharp pain in the testicle and spermatic cord, and was annoyed by a frequent desire to urinate.

I was called to see him an hour after these symptoms occurred. By this time, the pain in the tumour had nearly subsided, the pain in the testicle and spermatic cord was unabated, and the patient occasionally vomited. I examined the tumour carefully; it was hard and elastic, about the size of a pigeon's egg, and admitted of rude handling without causing pain. The patient insisted that there was nothing the matter with him there,—that this was nothing but an indurated gland, that it was not much larger than it had always been, etc. I was disposed to regard it as an irreducible crural hernia which had suddenly become strangulated. The other symptoms suggested naturally the idea of the passage of a renal calculus. I directed a large opiate, a hip-bath, and an enema of warm water, hoping that the symptoms might, in fact, depend upon the presence of a concretion in the ureter. My uneasiness, however, was so great from the conflicting character of the symptoms, and from the fact that I was not the regular medical attendant, that I determined to request a consultation.

The late Dr. Warner saw the patient with me an hour afterwards. The pain in the tumour had completely disappeared, and the other symptoms were greatly ameliorated. The enema had brought away a small quantity of indurated fæces. Dr. Warner expressed the opinion that the tumour was a glandular enlargement. A calomel purgative was ordered, to be followed by castor oil on the following morning.

At our visit the next day, the patient expressed himself as having passed a quiet night, and was entirely free from every kind of suffering. The medicine had not acted; we directed an enema. In the af-

ternoon, we found the patient as comfortable as in the morning,—still the medicine had not acted. The patient was directed to take pills of calomel and colocynth during the night.

On the following morning, finding that there had been no action on the bowels, my anxiety in regard to the nature of the tumour, which still remained painless and uninflamed, returned. I again requested the presence of Dr. Warner, who had discontinued his attendance, so little apprehension did he feel in regard to the case. We re-examined the swelling with great care. Its appearances were unaltered, it had not increased in size, and our manipulations gave no pain. Dr. Warner, after mature consideration, saw no reason to change his opinion. The patient was ordered a black draught, and frequent warm water enemas.

The next day, the constipation continuing without any farther developments, the late Dr. Cullen was called in to the case. The nature of the tumour was fully discussed. Professor Warner still adhered to his opinion, but with some reservations. Dr. Cullen felt great doubt about the case, and rather inclined to the opinion that it was strangulated omental hernia. In this view I fully concurred. But neither Prof. Cullen or myself were so confident as to justify a decided advocacy of an operation. The purgative treatment was continued.

The next day, being the fourth day from the commencement of the attack, stercoraceous vomiting set in. Up to this date there had been neither fever nor restlessness, nor nervous excitement. The repeated purgatives had failed to excite vomiting or distress of any kind, and, in fact, the only circumstance calculated to excite alarm, was the absence of fæcal evacuation coinciding with the existence of a femoral tumour. There was no meteorism or abdominal tenderness. The propriety of an operation was now anxiously discussed. Dr. Warner still greatly doubted its necessity, and it was not emphatically urged by Dr. Cullen or myself. The doubt in the case arose from the fact that pain in the tumour remained so short a time, that the early symptoms indicated the passage of a calculus, the disappearance of vomiting until the fæculent matter was gulped up, and the exact resemblance of the tumour to an indurated gland.

The patient continued to vomit stercoraceous matter for nearly forty-eight hours, and great prostration and anxiety supervened. It became evident that he must soon die unless relieved, and an operation was decided upon.

Dr. Warner accordingly cut down upon the tumour, and, after dividing the fascia propria, came to the sac. This tunic was much engorged, but presented no signs of mortification. It contained, in Dr. Warner's opinion, both omentum and intestine. After dividing the stricture at the crural arch, upon employing taxis, Dr. Warner felt the intestine returning into the abdomen. He believed that the strangulation was entirely exterior to the sac, and therefore returned the omentum and sac together. The reduction of the entero-epiplocele was unavailing. The patient succumbed in less than three quarters of an hour after the operation.

Unfortunately, it was quite impossible to induce the family to consent to an autopsy.

Ordinarily, there is but little doubt as to the proper course to be pursued in strangulated femoral hernia. This kind of constriction usually makes very rapid progress, and rarely yields to the medical means for the reduction of hernia in general. Therefore, as soon as peritoneal pain is manifested, the surgeon should hasten to operate. The diagnosis may present great difficulties. There may be symptoms of ileus with a small hernia, still contained in the crural canal, with an inflamed lymphatic gland super-imposed upon it. In a case of this sort, Sir Astley Cooper once operated, although he doubted all the time whether a hernia really existed. The operation was here a means of diagnosis for the practitioner. In the case I have related, there was no abdominal tenderness present at any time. I have always sincerely regretted that there was no post-mortem examination to elucidate this and the other obscurities attending its unfortunate history. The operation, however, clearly proved that the fatal issue depended upon an unrelieved hernia, and I think that the lesson which the case teaches is: That it is better to operate unnecessarily, where a suspicion of strictured intestinal protrusion exists, than to wait for the unmistakable evidences of strangulation to declare themselves.

On this subject the advice of Vidal (de Cassis) is so clear and judicious, that it should constitute one rule of action, and I cannot refrain from quoting it here. In speaking of the difficulties of diagnosis in crural hernia, he says: "We may likewise be deceived if sympathetic vomiting coincides with inflammation (or enlargement) of an inguinal gland. In this case, the doubt in regard to the true nature of the tumour, should not induce us to reject an operation, which is the only means of salvation in the case of hernia, and which will add but little to the gravity of the disease if we have to do only with an indurated gland."*

CASE II.—The 20th of November 1853, I was called to see Winny, a slave, æt. 53. She was a delicate woman, of intemperate habits, and had not enjoyed good health for the last three or four years.

About 3 o'clock, P. M., I found her suffering from slight fever, and complaining of pains in the joints and back, which she attributed to rheumatism. She stated that she had suffered from rheumatism for

* VIDAL (de Cassis). *Traité de Pathologie Externe et de Médecine Opératoire.* Tome iii, p. 241. 2d ed. Paris. 1851.

two or three weeks past, but not to such an extent as to unfit her for performing the duties of a cook to a large family. She had prepared breakfast that morning, and had nearly finished her preparations for dinner, when her sufferings became so great that she determined to take her bed. I learned that she had vomited once or twice early that morning. On account of the rheumatism, she had taken on the afternoon of the previous day, a tea-spoonful of the wine of the seeds of colchicum, and had subsequently repeated this dose twice.* This statement satisfactorily explained to my mind the vomiting, especially as the woman referred her sufferings to the joints and back, and presented the general aspect of a person only slightly indisposed. Thinking the nausea would be relieved by an action on the bowels, I directed a dose of magnesia, which was to be repeated, if necessary, in six or eight hours.

I felt so little doubt of the correctness of this opinion, that I said to the owner of the slave that I should not call again, unless I heard from him.

About 10 o'clock on the next day, I was again summoned. As soon as I entered the room, I perceived a faecal odour. I ascertained that the medicine had failed to evacuate the bowels, that both doses had been rejected, and that the patient had vomited all night. I was struck with the increased feebleness of voice, the fallen countenance, and weakened pulse of my patient and by an ominous hiccoughing. I asked to see what she had thrown up. A quart or more of stercoraceous matter was brought to me. I felt great alarm, which was increased by the fact that I had been aware, for two or three years, that my patient laboured under irreducible femoral hernia on both sides. I immediately proceeded to examine the tumours. The patient smiled incredulously as I touched them, and declared that the seat of pain was elsewhere, laying her hand upon the umbilical region. I asked her if she had felt the slightest pain in either tumour at any time since the commencement of the attack. She answered emphatically in the negative. I tried to reduce the hernia, but did not persevere any length of time in the effort, as I had failed in the taxis on several occasions two or three years previously, the protrusions, at that time, having already existed for seven or eight years. Neither tumour presented any appearance of inflammation, or appeared any larger than three years before. Both were hard and inelastic. The left was about the size of a pigeon's egg. The right was somewhat smaller. They could be roughly handled without causing pain; on the contrary the slightest pressure in the umbilical region caused acute suffering. I greatly feared that my patient was suffering from strangulated hernia. I directed warm water enemata and a calomel pill every two hours. The first enema brought away a small quantity of indurated faeces.

Before leaving the house I requested a consultation. Professor Gibson met me two hours afterwards. After I had given him a full his-

* Subsequent facts lead me to believe that it was very possible that the patient had exceeded the dose of colchicum here stated on her authority.

tory of the case, he proceeded to examine the tumours, and, in the absence of every sign of inflammation, greatly inclined to the opinion that neither of them was the seat of difficulty. As the patient's condition, in our judgment, would admit of delay in an operation, we determined to continue the treatment I have already mentioned.

When we visited the patient the next morning, she had taken ninety grains of calomel, yet she had passed nothing from her bowels. She had vomited only once in the last eighteen hours. Her general aspect was the same as on the previous day. We administered an enema of warm water, and both of us felt almost sure that this was followed by a small dejection from the upper bowel. This hope induced us to postpone an operation for a few hours longer. We directed castor oil.

We returned six hours afterwards. The oil had not operated, although it had been retained upon the stomach. The patient now complained of slight pain in the hernia of the left side. Her condition was apparently not more alarming than it was twenty-four hours before. I have already stated that she had vomited once only during the last twenty-four hours. An operation was decided upon.

Dr. Gibson operated. After laying bare the hernial sac, he found it constricted by the falciform process of the fascia lata, and, when this stricture was divided, a second was discovered at the crural ring. The sac was congested, but not to such an extent as to make it unsafe, in Dr. Gibson's opinion, to return the protrusion without examining the bowel. Accordingly the second stricture was divided, and the hernia was reduced.

Three hours after the operation, it was evident that the vital powers were fast ebbing. There was no action upon the bowels, and at about eleven at night, five hours after the operation, the patient died.

Autopsy.—The post-mortem examination was made seventeen hours after death. The abdomen was largely distended with flatus. The parts concerned in the operation were first noticed. The sac consisted of a thickened process of peritoneum, resembling the finger of a glove, about two inches long, and of a dark red colour. The strangulated knuckle of intestine was a very small portion of the ileum; there was a deep sulcus around it, produced by the upper stricture. It was ecchymosed, of a dark ruby colour; its texture was not much softened; in fact, its appearances corresponded to those which Aston Key describes as characterizing the first stage of strangulation. It was evident that none of the contents of the bowel had passed this point. The intestines above and below presented little alteration; they were filled by a large quantity of fluid and semi-fluid matter. The right hernia was examined. The portion of bowel engaged in the sac was so small as just to include the whole calibre of the gut. The sac had formed adhesions in the crural canal; the hernia was reduced from within; there was a dark ring around it, apparently depending upon post-mortem stasis in the capillaries where the gut was embraced by the neck of the sac.

There were no signs of general peritonitis of any kind.

The stomach, which was enormous, was distended, and reached quite down to the umbilicus. It contained a small quantity of fæculent matter. It was intensely inflamed; the posterior wall was infiltrated and ecchymosed. The mucus membrane was softened and broke down readily. The softening did not appear to depend upon the solvent action of the gastric fluids, for it was not more remarkable about the great curvature than elsewhere.

The other abdominal viscera were tolerably healthy.

In this, as in the former case, we were embarrassed in coming to a decision in favour of an operation, by the entire absence of pain in the tumour during more than forty-eight hours from the commencement of the attack, by the knowledge that the patient had taken a large dose of a medicine calculated to produce the vomiting and abdominal pain, and by the fact that the symptoms of prostration had not increased sensibly, while the vomiting had greatly diminished, and fæcal matter had passed, as we supposed, from above the incarcerated portions of intestine.

In this case the proximate cause of death was probably the intense gastritis; such, at least, was the opinion of the two medical men who assisted at the autopsy. The aspect of the portion of gut which had been strangulated was such as to warrant the belief that it was capable of resuming its functions, and there was a very partial stricture only in those tissues immediately adjoining the strictured parts. Death occurred in about sixty hours after the patient complained of indisposition. This fact, taken in connection with the state of the abdominal viscera, lends additional weight to the opinion that the gastric inflammation was the immediate cause of death.

ART. V.—*Clinical Reports of the Richmond College Infirmary.*

By T. P. MAYO, M. D., Resident Physician.

CASE I. *Extensive Necrosis of the Shaft and Head of the Humerus and Glenoid Cavity of the Scapula, with Anchylosis of the Shoulder-joint. Amputation at the Neck of the Scapula.* (Under the care of Professor Gibson).

Lewis Adams, of North Carolina, æt. 31, presented himself for treatment at the Infirmary on the 30th of October 1853. He gives no very intelligible account of his case from its commencement, three years ago, up to the present time.

He is now much emaciated, and upon inspection one would be immediately struck with the wasted and atrophied appearance of the muscles about the shoulder and arm of the left side. There is complete ankylosis of the scapulo-humeral joint, a sinus upon the inner aspect of the arm about three inches below the head of the bone, and another two inches below the first, upon the outer side, through both of which the denuded bone can be readily felt with the probe, and from which, he states, portions of bone have been from time to time discharged.

There being no doubt as to the nature of the case and the treatment to be pursued, Prof. Gibson decided at once to amputate the limb at the shoulder-joint.

The patient was fully anæsthetised; the subclavian artery was controlled by pressure. There being no possible chance of obtaining a flap from the deltoid muscle, an incision was made, commencing at the acromion process and carried down upon each side of the arm for about four inches. The joint was then exposed, the head of the bone sawn through, the knife passed down behind the humerus, the limb removed, and the axillary and one or two smaller arteries secured by ligatures.

Upon examination of the parts, it was found that the disease extended above the point where the section was made. The saw was again brought into requisition, and with it, and the bone-nippers, the whole of the glenoid cavity was removed. The edges were accurately brought together by sutures and adhesive strips, and the wound dressed with simple cerate.

On the third day after the operation, the wound was found to have healed by the first intention throughout half its extent.

After four or five days, generous diet with porter was ordered, and has been continued until now (Nov. 25th), when all the ligatures have come away, and the stump is nearly well.

CASE II.—*Intestinal Fistula,—Death,—Autopsy.*

Barney Gunn, æt. 35, was received on November 7th, 1853. He was exceedingly emaciated and offensively odoriferous.

About four months since, he was attacked with acute pain in the region of the right kidney, for which he was cupped and otherwise treated without much relief. In the course of a month or six weeks, an abscess formed in the right groin, which after a time was opened and discharged a quantity of ill-conditioned pus. After the lapse of another six weeks a second abscess pointed midway between the ant. sup. spinous process of the ilium and the symphysis pubis, on the same side, which ulcerated through the integuments. These two ulcers communicated with each other by a large sinus.

The peculiar smell and appearance of the discharge, which flowed incessantly and in great quantity from the upper orifice, warranted at once the diagnosis of intestinal fistula.

What is rather singular in this case is the fact that the patient had fecal discharges from the anus *unmixed with pus*, while from the fistulous orifice both purulent and feculent matter were voided.

He said that at times he had picked out pieces of corn bread and po-

tatoes which had come through the opening; though closely watched while here, nothing of the kind could be detected.

The case was pronounced a hopeless one, and nothing done except to keep the patient as clean as possible, give him any diet he liked, and use chloride of lime freely about his room.

He lingered until the 20th, when death, to him a welcome visitor, put an end to his suffering.

Autopsy.—Upon tracing the course of the sinus from the upper orifice it was found to lead directly into an opening in the ascending colon just above the cœcum. This opening was circular, about the size of a half dollar and its edges were gangrenous. The psoas muscle was the seat of an abscess which contained at the lowest estimate a pint of pus. The right kidney was very much congested, and so soft as to be easily broken up with the fingers. There was also a sinus leading from the lower orifice downwards for about six inches, in the course of the femoral artery.

This interesting pathological specimen has been carefully preserved and put in the museum for the inspection of the curious.

CASE III.—*Double Hard Lenticular Cataract.* (Under the care of Dr. Johnson).

Ambrose, a negro man, aged 55, entered the institution on July 23d, 1853, with hard lenticular cataract in both eyes. His general health was good, there was no vascular disturbance about the eye or head, and the iris responded well to belladonna.

The following day, the pupils being fully dilated, Dr. Johnson introduced the needle, in the usual way, into the left eye, and without any difficulty removed the lens from the axis of vision.

The instrument, then held in the left hand, was made to penetrate into the posterior chamber of the opposite eye, but upon touching the lens it was found that every movement impressed upon it, was accompanied by a corresponding motion of the iris, and that any further attempts to dislodge it would, in all probability, result in iritis, which might, by extension of inflammation, involve the whole organ and cause its utter destruction; it was therefore deemed inadvisable to interfere with it.

Ice-water was applied, and the patient was put in a dark room and ordered a purge.

Five days afterwards an opaque shred was visible behind the pupil, and the patient was put upon a mercurial course. He now has excellent vision with the left eye.

CASE IV.—*Double Cataract.* (Under the care of Dr. Johnson.)

Chloe, a negro woman, aged 60, entered the infirmary July 25th, 1853, with lenticular cataract in both eyes. The left cataract was hard, the other soft. The iris having been subjected to the action of belladonna, the left eye was operated upon by reclinacion. Astonished at the flood of light which burst upon her as the lens was removed from the visual axis, the old woman loudly expressed her wonder and joy.

So soon as the patient became sufficiently composed, the operation of division and solution was done with the left hand upon the other eye.

The same course of treatment was adopted in the subsequent management of this case as indicated in the first, and the patient now sees, with the aid of her glasses, which were carefully selected, as well, if not better, than most persons of her years.

ART. VI.—*Paralysis of the Motor Communis Oculi or Third Pair of Nerves*. By CARTER P. JOHNSON, M. D., Professor of Anatomy and Physiology, Richmond, Va.

During the spring of 1852 I was consulted by Mr. M——, of Brunswick. He was about 60 years of age, tall and powerful in stature, quite corpulent, with a short neck and very large head. His general health had been good until the past two years, during which he had suffered several attacks of vertigo, all of which however had speedily passed off, leaving apparently no serious effects. For several months he had experienced severe pains in his knees and ankles, which were supposed to be rheumatic, and which had materially interfered with his powers of locomotion.

Upon awaking one morning about two weeks before I saw him, without being conscious of having suffered any attack of vertigo, he found that he was *unable to open his right eye*, though he was not aware that any change had taken place in the globe of the eye.

When he presented himself to me there was very complete ptosis, the upper lid drooping so as quite to cover the pupil with no power on the part of the patient to elevate it. He could only see out of that eye by throwing back the head and looking under the edge of the upper lid. He could firmly close the lids and their sensibility was as perfect as on the other side, thus proving the integrity of the seventh pair and fifth pair. Raising the lid, I found the globe of the eye turned outwards; the patient not being able to carry it inwards. The pupil was dilated, and though not entirely immovable, responded very feebly to the stimulus of light. The left eye was entirely normal. My diagnosis was paralysis of the third pair of nerves on the right side, from *effusion* posterior to the ciliary ganglion. Before stating the grounds of the opinion, I will mention the result of the case so far as it has become known to me. The patient had become very much debilitated by his previous attacks and the treatment necessary to relieve them.

He was feeble and pallid. I therefore recommended constant counter-irritation to the temples or nape of the neck, occasional mercurials, and the use of Vallet's carbonate of iron, with a moderately nourishing diet. While pursuing this treatment his general health improved, and the affection of the eye gradually subsided, disappearing entirely in the course of two months. After the lapse of some time, however, his vertiginous affection returned, impairing very materially the powers of his mind and increasing the difficulty in his locomotion. He is still, I believe, alive, but in a very helpless condition, both mentally and physically.

I now return to the examination of the affection of the eye as first presented to me, and proceed to state the grounds upon which I base the diagnosis. It will be recollected that there were three prominent symptoms: 1st, ptosis; 2d, diverging strabismus; 3d, dilatation and immobility of the pupil. Now what does our Anatomy teach us? First, that the upper lid is raised by the *levator palpebræ superioris*, and that this muscle is supplied with its motor nerve from the third pair. Compression of this nerve would therefore paralyze this muscle and produce falling of the upper lid—ptosis. Next, that the globe of the eye is drawn outwards by the *external rectus*, inwards by the *internal rectus*; the latter is supplied with its motor nerve from the third pair, the former is supplied with its motor nerve from the sixth pair. Compression of the third pair would therefore paralyze the internal rectus, leaving the globe under the control of the external rectus, which would draw it outwards, producing diverging strabismus. And again, that the iris receives its motor nerves from the ciliary ganglion, which ganglion is supplied with its motor filaments from the third pair. Compression of the third pair (posterior to the ciliary ganglion) would therefore paralyze the iris and produce dilatation and immobility of the pupil.

Paralysis of the third pair of nerves at the point indicated, would therefore explain all of the symptoms presented by this case, and is the only supposable condition that would. That the paralysis was the result of effusion from the blood vessels, I inferred from the previous history of the case, the patient having been the subject of repeated vertiginous attacks, and from the anatomical fact that just after the emergence of this nerve from the cerebral peduncle it is closely surrounded by the posterior cerebral and superior cerebellar arteries.

I have not been able to find any case which so completely illustrates the physiology of this third pair of nerves as the above. Longet

(*Système Nerveuse*, vol. 2, p. 382), has distinctly pointed out the three effects which we have seen above, viz: ptosis, strabismus, and dilatation of pupil, following section of the third pair in an animal, and he alludes to pathological cases in man, but he does not mention any. Sir Charles Bell (*The Nervous System*, p. 370, et seq.), mentions several cases, to one or two of which it may not be uninteresting to refer. In a case reported by Samuel J. Stratford, there was ptosis, no power to look upwards, downwards or inwards, but the ability to look outwards. Condition of pupil not stated. May not this have been a case of paralysis of the nerve anterior to the ciliary ganglion? In commenting upon this case Sir Charles Bell, thoroughly versed as he was in this portion of anatomy, makes the following singular erroneously remarks. "It is said by surgical writers that where there is ptosis, the patient seeing a little under the eye-lid, soon gets into the habit of squinting. Squinting is never a habit, the fact being that the weakness of the levator arises from a defect of the nerve common to that muscle, and to all the voluntary muscles of the eye; and hence the involuntary muscles acquire a preponderance or comparative increase of power, and drag the eyeball." Now the abducens or external rectus is a voluntary muscle, and is not supplied by the same nerve which supplies the levator and the other voluntary muscles, and the strabismus is, in cases of ptosis, produced not by the preponderance of the involuntary muscles but by the preponderance of the external over the internal rectus, which latter is, in common with all the muscles supplied by the third pair, paralysed. In another case, beside other symptoms which complicated the diagnosis, there was ptosis, squinting, and immobility, and dilatation of the pupil, with complete preservation of the functions of the fifth and seventh pairs. This case died, and the autopsy revealed that "the third pair on the right side (the side affected) was hardly discoverable amongst the coagulable lymph, from its having degenerated and acquired transparency." A third case reported by Mr. Shaw in the *Medico-chirurgical Transactions*, I may be excused from quoting in his own words. "A young woman had a fungous tumour under the jaw; the cheek of the same side was paralytic; the upper eyelid of the same side had fallen; but when the eyelid was raised, the patient could see distinctly, although the pupil was fully dilated and immovable. Upon dissection it was found that the tumour had extended into the lateral part of the orbit; the fourth nerve ran over the tumour, the third was in the substance of it, but the ophthal-

mic division of the fifth pair was the nerve most destroyed; the sixth was partially affected. The tumour did not reach as far as the optic nerve." It will be observed in this case, that there was ptosis, and dilatation, and immobility of the pupil, but no strabismus. This was due to the involvement of the sixth pair in the disease by which the abducens was also paralysed. If the views expressed by Sir Charles Bell in Stratford's case given above were true, this case of Mr. Shaw should have been the very one to exhibit strabismus; for in it the fourth pair of nerves, Sir Charles' involuntary nerve of the eye, was the only one of the motor nerves of the eyeball which was not involved in the disease, and consequently the involuntary muscle here was predominant. But no strabismus is mentioned by Mr. Shaw.

I cannot conclude this article without calling attention to an important means of diagnosis in certain cases of amaurosis to which we are led by the knowledge of the anatomical facts which we have just been stating. In amaurosis the pupil is dilated, and when the disease is complete, if the sound eye be closed, the pupil is immoveable. Such is the case also in paralysis of the third pair of nerves; but for a very different reason. The pupil contracts under the influence of light because the impression made upon the sensitive retina is carried back through the optic nerves to the tubercula quadrigemina, whence a reflected action passes through the cerebral peduncles and the third pair to its ciliary branches, which being distributed to the iris produce its contraction. Now in amaurosis this contraction does not occur because the first link in this chain of phenomena is wanting, the retina has lost its sensibility and no impression is produced upon the optic tubercles. In paralysis of the third pair, the contraction does not occur, because the last link in the chain is wanting; the third pair cannot carry back the reflected influence, although the impression may be produced upon the retina and be carried to the optic tubercles. Now the point of diagnosis is this. In amaurosis the defect is in the retina of the diseased eye. If you will apply the stimulus of light to the sound eye, the pupil of the diseased eye will contract, because an impression made upon one retina and passing back through one optic nerve to the optic tubercles will produce a reflected action through both of the third pair of nerves, and of course will produce a contraction of both pupils, (*Longet ut supr.* Vol. 2, p. 61). In paralysis of the third pair the pupil will not contract under the influence of light applied, either to the sound or the diseased eye.

CHRONICLE OF MEDICAL SCIENCE.

The translations and abstracts under this head, are made expressly for this Journal.

ANATOMY AND PHYSIOLOGY.

1. *On the Histology of Red Blood.* By J. L. RIDDELL, M. D., of New Orleans.

[This paper was presented to the *Association for the Advancement of Science* at its meeting in Cleaveland. We find the following abstract of it, in the *Annals of Science*, No. 22.]

In his examinations of the blood of various animals, Dr. Riddell employed one of Spencer's best sixteenths, having an angular aperture of 174° . By means of this glass, he had been able to detect a structure (*pallium vesiculatum*) which is the distinctive tissue of the red corpuscle. The function of this tissue is to absorb oxygen in respiration, for the use of the system. In its structure are multitudes of minute spherical vesicles of nearly uniform size for each species of animal. Dr. Riddell's observations were principally made upon the blood of the *Amphiumatri dactylum*, Cuv., a Batrachian reptile, common in the muddy swamps of the Louisiana delta, often seen four or five feet long, and almost black in colour; the negroes about New Orleans call it the Congo snake. The blood globules frequently exceed in length one two hundred and fiftieth part of an inch. After adding to the blood a solution of common salt, and afterwards acetic acid, certain appearances are brought out: 1st, a composite cell, strictly analogous to other animal and algoid cells, viz., the *nucleus*, containing numerous nucleoli, which, in turn, are visibly filled with nucleolar and granular contents; 2d, the vesiculate mantle, *pallium vesiculatum*, or specific peculiarity of a red corpuscle, containing in its texture a great multitude of minute spherical vesicles of similar size, being the site of the red colour of the blood, and the substance which probably serves as an oxygen bearer, from the lungs to the capillary tissues.

2. *On the Origin of the Capillary Blood Vessels.* By DR. RIDDELL.

[We are indebted to the same source for the following digest of Dr. Riddell's second paper presented on the same occasion.]

"Dr. Riddell remarked that Schwann had first attempted to explain

the origin of the capillary blood vessels, by means of the stellated form which cells were observed often to assume, and which points prolonging, afterwards became capillary vessels. He, however, had recently investigated the subject to his entire satisfaction, by repeated observations upon the development of the ova of the tree frog (*Hyla arborea* Lam.). It was obvious that the earliest embryonic blood corpuscles differ from the structure cells in being unattached, and free to move, rather than in size, colour, or histographic peculiarity. Capillary vessels are formed by intercellular spaces, partly the effect of growth, and partly the result of the intromission of a clear fluid between the adjacent cell walls, thus commencing an intercellular lymphatic circulation, probably leaving a trace of plastic deposite in its path, and producing curiously ramified structures. As the development and growth of the tissues proceed, the incipient vessels hitherto containing and transporting a transparent fluid, seem to be distended by the tension of their contents, and by the impetus of the blood corpuscles and serum. This impetus is derived obviously from the action of the heart; the corpuscles are forced into the mouths of the incipient vessels, and unable to return by their path of entrance, they are forced to open for themselves through the ramifications of the incipient vessels, a new channel of circulation, some of them becoming attached, and forming valves. Dr. Riddell referred the motive power of the blood entirely to muscular action."

3. *On the Structure of the Liver.* By Professor KOLLIKER.

[The second volume of the great work on microscopical anatomy* by the professor of Würzburg has recently been published. The writings of Dr. Kölliker are familiar to the student of histology, and his name is well known to the profession at large from his discovery of the involuntary muscular fibres of the urethra and prostate, and his researches into the intimate structure of muscular tissue. This part of the *microscopische anatomie* is devoted to the histology of the organs of digestion and respiration; these subjects occupy 900 pages, from which an idea may be formed of the comprehensive manner in which they are taken up. Each organ is successively and minutely described, the explanations being rendered clearer by 127 engravings on wood, most of them original. We should greatly transgress the limits to which the preference of the profession for (so called) practical matters restricts us, were we only to advert to the various subjects which are profoundly discussed in this admirable treatise; we therefore prefer giving an analysis of a fragment only, and in selecting the chapter on the structure of the liver, we are influenced by the consideration that while no subject in microscopical anatomy has given rise to more discussion than this, there is yet none upon which opinions are more widely at variance.

* *Microscopische Anatomie oder Gewebelehre des Menschen*; von Dr. A. KOLLIKER. Zweiter Band: Leipzig: 1852.

The most important observations upon the structure of the secretory parenchyma of the liver may be condensed as follows.]

1. The structure of the liver is analogous to that of the glands in the form of a bunch of grapes. Prochaska, and Müller after him, have admitted that the biliary ducts terminate like those of the pancreas and salivary glands, that is to say, by a sort of cul-de-sac. Krause, who, in 1837, maintained that the canaliculi ended in inflated extremities like little bladders, supported his opinion, in 1845, by new experiments. According to this author, who examined the uninjected liver, these expanded extremities are of a yellowish colour, from the fortieth to the sixty-fifth of a line in diameter; they are placed in apposition, and contain a yellow liquid. Langenbeck holds this view also.

2. The portion of the liver which secretes the bile is a vascular network. Kiernan supposed that an anastomosis existed between the ultimate glandular elements of the liver. Weber supported this doctrine by direct experiment, and most authors have since adopted it. As to the manner in which this net-work is composed, it is admitted: *a.* that it is formed by true canals, with a pervious passage and wall, which result from the fusion of the hepatic cells; *b.* that these canals are situated between the cells of the liver. According to this last hypothesis, the canals are tubes provided with a structureless membrane which envelopes the cells of the liver (Schoeder Van der Kolk, Backer, and Retzius), or they are simply inter-cellular spaces (Gerlach, Natalis Guillot). *c.* It is possible that the net-work of the hepatic cells is solid, without other cavities than those of the cells themselves. In this case, the finest ramifications of the biliary vessels do not penetrate into the lobules, but terminate in a cul-de-sac upon their external surface.

3. The secretory parenchyma of the liver is formed by interlaced canaliculi in the form of trellis-work, without terminations, and without anastomoses (Arnold).

Before discussing the value of these opinions, which it suffices to bring together in order to show their diversity, let us see what results from microscopical observation. Each hepatic lobule contains two elements: 1. A net-work of capillaries continuous, on the one hand, with the ultimate ramifications of the portal veins, and opening, on the other, into the central vein of the lobule, which, as is well known, is one of the origins of the hepatic vein; 2. a plexus of partitions, formed exclusively by the juxtaposed cells. These two plexuses are so closely united, that the voids in the one are completely filled by the other, so that no unoccupied space is left. In this net-work there is not the slightest trace of biliary vessels; it is only at the periphery that they are perceived; it is in the same way on the exterior alone that the smallest ramifications of the *venæ portæ* are found. It has hitherto been impossible to determine the exact relations of these two orders of vessels with the cellular mass which really constitutes the accerning parenchyma.

If such, without entering into the intimate details of the structure of the cells, the composition of the hepatic parenchyma in which se-

cretion takes place, one is struck by the difference between the liver and the other glands of the human body, and asks how the liquids formed in the interior of these cells is conducted and transported outwards. Anatomy does not solve the question satisfactorily; it follows the branches of the excretory apparatus, accompanied by those of the portal vein, quite to the lobules, it leaves us in doubt as to the connection between their ultimate branches and the cellular plexuses. Dr. Kölliker, notwithstanding the most attentive and persevering researches has never been able to arrive at a positive conclusion. There is a void here which is but poorly filled by hypotheses. Among the most probable suppositions, is the one which describes the vessels as terminating against the walls of the cells, so that their calibre is closed by the partitions of the latter. In any case, the openings of the ducts upon the surface of the lobules are not very numerous, the ultimate branches of the biliary canaliculi being comparatively small in number.

The biliary ducts being in contact with the external wall only of the lobules, the bile formed in the interior of these lobules must travel from cell to cell. This mode of transmission of a liquid through closed cells presents in itself nothing impossible; vegetable physiology furnishes many examples of it; but in these cases its passage is much slower than when it is effected by ducts. The bile, as experiments prove more clearly every day, is not alone an excrementitious product of the blood; it is formed in the liver, and, as it is the most complex of all the secretions, it is natural that the parenchyma should correspond to its composition. In fact, the plasma of the blood, having to traverse a great number of cells and to undergo their metabolic influences before reaching the excretory ducts, ought to be subjected to greater modifications than are effected in the ducts of glands in general. The slowness of the secretion is compensated by the elaboration of the product and the size of the organ.

[In this rapid analysis, in which we have suppressed the figures and minute details, may be found the qualities which distinguish Dr. Kölliker: great simplicity of arrangement, great exactness of description, a true and clear idea of the limits to which micrography should be restricted. To make a science of observation a base for adventurous speculation, would be to retard its progress, and to throw doubt upon its most authentic results.]

MEDICAL THERAPEUTICS.

1. *On the Active Principles of Valerian and Belladonna in the Treatment of Various Convulsive Affections.* By M. MICHEA.

Under this title, M. Michéa lately read a memoir to the French Imperial Academy of Medicine, in which he proposed to make known the

advantageous results which he had obtained in the treatment of various convulsive diseases, and particularly in epilepsy.

M. Michéa's paper included eleven cases. The convulsive affections in which he had administered the valerianate of atropine were: epilepsy, hysteria, chorea, essential asthma, and hooping cough; but epilepsy is the capital point in the memoir. The majority of the cases (6 in 11) concern this disease, 2 relate to hysteria, 1 to chorea, 1 to asthma, and 1 to whooping cough.

The author sums up his investigations in the following general reflections:

In the 6 cases of epilepsy, the valerianate of atropine effected 4 cures and 2 ameliorations. All of the subjects who were cured were in the following conditions: They were young; the disease was still of recent date; it was produced by moral causes, by fright in 3 cases, by mental anxiety in the other. The attacks were neither preceded or followed by any disorder in the intellectual or moral faculties. One of the patients that were ameliorated only was 50 years of age, and had been epileptic for 7 years; the other was 67 years of age, and had suffered from epilepsy 25 years. In both, the attacks were complicated with intellectual disorder (loss of memory, incoherence of ideas, etc., etc.).

Relatively to the 5 other cases, the 2 hysterical women were cured, the patients attacked with chorea and hooping cough were also cured; the patient with asthma was only partially relieved; instead of returning three or four times a year, the attacks recurred once only.

The valerianate of atropine was administered in two ways, in globules and solution. The dose varies from the one hundredth to the twenty-fifth of a grain daily. In young subjects the one fiftieth of a grain must not be exceeded.

After administering the remedy for a week or fortnight, it is omitted for the same length of time, and then resumed. In this way, the treatment is continued for two, four, or, at the utmost, six months.

It is only in the case of hooping cough that the remedy has been given in a potion. It was taken in the dose of the fiftieth of a grain in four ounces of infusion of limes sweetened by three drachms of the syrup of tolu, a tea-spoonful every half hour.

The physiological phenomena produced by the valerianate of atropine do not differ at all from those which atropine itself determine. They consist in dilatation of the pupils, diplopia, slight vertigo, and dryness of the throat, which phenomena disappear very promptly when the use of the remedy is suspended.

In conclusion: 1. The valerianate of atropine is a precious remedy in many spasmodic or convulsive affections.

2. In epilepsy, it cures all the young subjects, adults as well as children, when the disease is recent, and is neither preceded nor followed by intellectual disorder. In epilepsy of long standing, or complicated with alienation, it does not cure, but it ameliorates the condition of the patients, lengthening the intervals between the attacks and lessening their violence.

3. The salt is preferable to valerian and belladonna, because the powders and alcoholic extracts of these plants are unreliable, and are inert unless recently prepared, without taking into account the foetid odour of valerian; and moreover, like all the active principles of vegetables, it acts in very small doses and always in a uniform manner.—*Gazette Médicale de Paris*. No. 40.

5. *On the Treatment of Tonsillitis by Blood-letting from the Ranine Veins.*

We read in the *Gazette des Hôpitaux*, No. 125, that a Spanish physician has recently sought to revive the practice of depleting from the ranine veins, which, though highly recommended by the ancients, has fallen into almost complete desuetude. It is in cases of acute inflammatory angina, accompanied by so much swelling as to render suffocation imminent, that venesection in the ranines appears to have been practiced with success.

Dr. Aran, who at present has charge of the service of M. Louis, at Hôtel-Dieu, lately took advantage of an opportunity of testing the efficacy of this method of depletion. A wine merchant, twenty-five years of age, after being suddenly chilled whilst in full perspiration, was seized with shivering and headache, and soon afterwards suffered from impeded respiration and difficult deglutition. Three days subsequently he entered Hôtel-Dieu, with intense fever. The patient's countenance expressed great anxiety, and deglutition was almost impossible. On examining the throat, the tonsils were found of a deep red colour, and so much tumefied as to leave only a linear interval in the median line. The *interne* of the service prescribed ipecac and tartarized antimony, which caused abundant vomiting and procured the patient temporary relief; but the next morning the tonsils were as large as ever, and the anxiety and fever were intense.

Dr. Aran, guided by the facts published by the Spanish physician of whom we have spoken, immediately practiced venesection of the ranines, and directed the patient to use gargles of warm water, to facilitate the flow of blood. Almost immediate relief followed this operation. Ten minutes after the venesection, the pain had diminished as well as the tumefaction of the tonsils, and deglutition had become easier. The next day the improvement was still greater, and in four days the throat was quite well.

Making every allowance for the effect of the emetic, administered on the entrance of the patient, in removing that saburral condition which constantly complicates this sort of angina, it is impossible to deny the influence of the depletion from the ranine veins in the rapid resolution of the inflammation in this case. The simplicity of this operation, and the facility with which it is executed will no doubt induce practitioners to try a practice which may have useful applications.

SURGICAL PATHOLOGY AND THERAPEUTICS.

6. *On Colloid and Epithelial Cancer.* By CHARLES ROBIN, *M.D.*
Professor to the Faculty of Medicine of Paris.

In the case of cancer, tubercle, and purulent collections, it is the aim of pathological anatomy to connect the morbid products with the normal anatomical elements from which they are most frequently derived. To start from a knowledge of the normal state, and thence to trace the real nature of an alteration, is the true method of investigation, which, unhappily, is not always followed.

The fact I have advanced is sufficiently proved by the frequent astonishment of surgeons, when, after a relapse of a tumour of the skin or rectum, pathological anatomy informs them that the product is not of a cancerous nature, but that its elements are those of the glands or epithelium of the region on which it appears. In fact, after having examined the glands or epithelium of a membrane, it is impossible not to believe that if some of these have become diseased and have been once removed, others would necessarily be left on the border of the cicatrix (glands), or upon its surface (epithelium). This, indeed, is what takes place. The follicles of a mucous membrane, for example, having once become hypertrophied, without our knowing why generally, we cannot see why those that remain should not become hypertrophied in their turn.

To attempt to find in the relapse of these tumours (which are the tumours, in fact, which return most frequently), an argument in favour of their cancerous nature, is an idea which can only be entertained by those who have neither examined the normal elements of tissues, or the morbid products of which they are the seat.

These notions are the result of experience and they now serve as a law to guide us in the study of pathological anatomy. Having applied them for three years past to the study of colloid and epithelial tumours, I have arrived at the following conclusions, which I will give without comment. The descriptions which support them will appear in the work on general anatomy upon which I am at present engaged.

1. The morbid products which arise from the glands or epithelium are of two kinds: 1. The colloid, which is a soft, gelatinous, homogeneous mass, of a white or yellowish colour, and of a viscid consistency.

If I restricted myself to what I have just said, I should say that I have never seen a true cancer of the skin or rectum which has retained the characteristic viscid and gelatinous consistency of nature.

2. The colloid granulations appear as a granular substance, of a quantity of an amorphous consistency, of a white or yellowish colour, of a viscid consistency, and of a soft, gelatinous consistency, which is easily dissolved,

interposed with the frame-work of the tumour, and often constituting the greater portion of the mass.

It is possible that this amorphous matter may be infiltrated amongst the elements of cancer, but I have never seen an instance of this.

3. All the gelatiniform tumours which have been sent to me, have been composed sometimes :

a. Of tumours having as a frame-work fibres, or fasciculi of fibres of cellular and elastic tissue, with a small proportion of fibro-plastic elements. These tumours were located either in the sub-cutaneous, inter-muscular, or sub-serous cellular tissue, the skin, the periosteum, the lung, or the distended inferior maxilla; in the last case the neurolemma of the dental nerve seemed to be the starting point.

b. Of tumours principally composed of fibro-plastic elements; these elements were more granular than they usually appear when unconnected with this amorphous matter, and are accompanied by a few fibres of cellular tissue. Tumours thus constituted, which are quite common, are found in the same localities as the preceding, except in the sub-serous cellular tissue.

c. At other times, and most commonly, this amorphous matter is interposed between hypertrophied glandular elements. This fact is especially observed in the rectum or other portions of the large intestine or in the stomach, that is to say in parts in which the mucous membrane is composed almost entirely of follicles pressed together.

The amorphous matter may also be found in hypertrophies of the glands of the Schneiderian membrane, of the parotid, of the mamma, and perhaps, of the liver and pancreas. Wherever the amorphous matter is abundant, there are here and there extravasations of blood.

4. Of the different conclusions of the portion of this investigation relating to epithelial products, I will only offer the last two, as the others have already been published in the theses of my pupils (Luna, Toutant, and Levé).

In the epidermic growths of the skin, when cells are developed in the thickness of the dermis which is attacked, the fibres of cellular tissue and numerous capillaries first become atrophied and disappear. The elastic fibres, on the contrary, persist for a long time, and are found intact between the epithelial cells and the epidermic scales, a fact which is never observed in tissues invaded by cancerous elements.

5. Cancer is rarer in the liver and other organs than was supposed before the microscope enabled us to compare the structure of morbid epigeneses of an organ with the structure of the organ itself. Under the name of tubercles of the liver, etc., there are ordinarily confounded with cancer of the liver, tumours which may affect the whole of that gland, and which are simply an epidermic affection, that is to say, a multiplication (with deformity in some) of the epithelial cells of the secreting tubes of the bile. These epithelial elements are constantly accompanied by yellowish spheroidal corpuscles, varying from the 12th to the 60th 1000th of a millimetre, of diverse forms, more or less granular, usually developed between the epithelial cells, and sometimes within these cells. These bodies are usually more numerous in pro-

portion as the tumour is large. They are found more or less abundantly in all epithelial tumours of the skin, tongue, vulva, scalp, etc. In these cases their volume is ordinarily greater than in analogous tumours of the liver.—*Gazette Médicale de Paris*. October 22d, 1853.

7. *Case of Mollusum Associated with Encephaloid.* By JOSEPH PARRISH, M. D. (With a plate).

[The accomplished and learned editor of the *N. J. Med. Reporter*, has lately described the following complicated case of one of the rarest and most obscure of the tubercular cutaneous diseases. Through his kindness, we are enabled to present our readers with his details of this interesting history, and also with the plate which illustrates it.]

CASE.—P. S——, a bachelor, aged 58 years, middle stature, always had enjoyed good health, habits retired, though active and industrious in his mode of life; his pursuits were various, as fishing, fowling, and gardening, with some attention to mechanics. I first visited him Nov. 8, 1852. He had not been well for several weeks, perhaps months; and bore the appearance of a person suffering from chronic ill health, with the following

Symptoms.—Pallid skin, feeble pulse, slightly accelerated, oedema of the left leg, accompanied with occasional, but irregular paroxysms of fever. He complained of fugitive pains in the affected limb, and through the trunk of the body; the urinary secretion was scanty, but the appetite good, and bowels usually regular. On examining his chest, my attention was directed to a tumour situated on the back, about one-third of the distance from the spine to the sternum, and near the sixth rib. It was flattened, slightly red, and about three inches in circumference—the base was rather smaller than the body of the tumour. It was first noticed by him some eighteen years ago, and as it had never caused inconvenience, he paid no attention to it. Within a few months of his present attack, several smaller ones appeared upon the inside of the thigh, which were first noticed by me, while examining a double inguinal hernia, of which he complained, an inefficient truss that he had worn for a considerable time, having failed to afford relief. The indications in the case seemed plain;—the herniæ were to be supported, the effusion removed, secretions established, and the tone of the system elevated if possible;—during a tonic course of treatment with diuretics, the oedema subsided, and the renal secretion became more plentiful; so that some hope was entertained of his permanent improvement. By way of an alternative he was kept for a while on Potass. Iodid. with Syr. Sarsap. Comp. For a few weeks I saw but little of him, but being sent for again, I found him evidently more ill: the little granular swellings on the thigh had grown to various sizes: he had emaciated to some extent, and there was positive evidence of serious disease. I devised a system of support which I thought his case demanded, varying it from time to time, *pro re nata*. One day, on examining his hernia of the left side, which was some-

what painful, I discovered a sub-cutaneous tumour, already quite prominent in the groin, and occupying a space nearly large enough to occlude the abdominal ring, which soon enlarged so as to form a complete natural truss. In a little while there congregated about this tumour, an abundance of smaller ones from the size of a pea to that of a chestnut; they spread rapidly, and following the lymphatic chain (SEE PLATE), were arrested below the knee, by the death of the patient. With the growth of the tumours, the œdema returned, and increased, the limb became paralyzed, and fixed in the position shown by the engraving. From the deep seated hardness that surrounded the tumour in the groin, which had now grown to the size of a cocoanut, and from the difficulty experienced by the patient in urinating, and in evacuating the bowels, I was convinced that there was an internal growth, probably as extensive as the external.

It was sometimes necessary to resort to catheterism in order to relieve the bladder, and to enemata, to empty the alimentary canal. After much continued suffering, the tumours having increased as represented by the plate, the poor man died early in September 1853.

It may be proper to notice the fact, that the disease had made its appearance in the right groin, and that one of the tumours on the left leg, just above the knee, and marked by a black spot, had commenced to discharge a thin fluid or pulp, probably of an *atheromatous* character.

Autopsy—conducted by Doctors Gauntt and Butler. The intestines were crowded forwards by a morbid growth about two inches in thickness, which embraced the spinal column in its entire abdominal portion, and had burrowed beneath the aorta, elevating it from its spinal attachment to the anterior surface of the tumour; the kidneys were in situ, but loaded with the adventitious weight, and the right ureter enormously distended. The pancreas and omentum, presented numberless minute tumours of varied size, and the internal surface of the bladder was rough with innumerable granular bodies, some of which presented above the surface, while others were only perceptible to the touch. In attempting to dissect out a portion of the mass, a sac was ruptured, which appeared to have formed within the psoas muscle of the left side, and from it escaped a large quantity of a thin glutinous fluid of a chocolate colour.

Character of the tumours.—Those upon the surface, that were confined to the dermoid tissue, may be justly classed with the molluscum of Bateman. Those which seemed to originate in the cellular tissue, and grew largest in size, presented more the hard scirrhus character, while the intra-abdominal mass was a pulpy encephaloid matter that may be ranked as “cancerous softening.”—*N. J. Medical Reporter*. November.

[This is the third case of this disease which has been reported in this country. In his judicious remarks upon it, Dr. Parrish, after reviewing the scanty literature of the malady of which it is an example, enquires into its pathology. He believes that the data we at present possess are insufficient to define this positively, but he is inclined to



MOLLUSCUM with ENCEPHALOID DISEASE

T Jackson Ltd

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1. The first step is to identify the problem or question that needs to be addressed. This involves understanding the context and the specific requirements of the task.

the aneurisms caused by venesection, because the tumour was not precisely at the bend of the elbow. I tried compression, but it was so painful that it was abandoned. Should I immediately apply the ligature? Grave considerations were opposed to this course. The paralysis of sensibility and motion showed that the median nerve was wounded; innervation was at least suspended. Was it proper to add to this cause of gangrene the ligature, and to suspend the circulation also? I resolved to wait. Cataplasms were applied. The pain frequently required the topical application of opiates. At last the aneurism, diffused at first, became encysted and circumscribed. I tried compression again, and was again forced to desist.

Allow me a slight digression on the employment of compression in aneurism. This method is accepted by some and rejected by other surgeons. Who are right? Both. . . . Compression, according to circumstances, is an excellent or a detestable method. The conditions which require, and those which contra-indicate it, must then be determined.

The division of aneurisms into spontaneous and traumatic, will serve us as a guide. In spontaneous aneurism, 99 times in 100, the two internal tunics are ruptured, and dilatation occurs at the expense of the external tunic; the two first form between this and the calibre of the artery, a sort of floating diaphragm with an opening with fringed borders. To cure the aneurism, it is necessary either to close this opening, which allows the blood to pass and to dilate the sac by its continual impulse; or else we must obliterate the artery. In order to compress the artery in such a manner that its opposite walls may take on adhesive inflammation, it is requisite that it should be superficial and should pass over a bone, circumstances which are rarely met with in those arteries most liable to *true* aneurism. Can we act to advantage on the orifice in the diaphragm? In these cases the internal tunics are altered, and their low vitality is almost extinguished when they are separated from their envelope, that coat in which the nerves and vessels ramify. The reunion of parts thus broken and separated, can hardly be anticipated therefore. Moreover, as, notwithstanding the compression, the blood still passes between the coats through the solution of continuity, it *dissects*, as is said, the cellular membrane, enlarges the sac, and extends it above the primitive lesion, in a manner which may lead the surgeon into error, by making him believe that the aneurism is seated higher up than it really is.

An aneurism of the femoral artery treated by compression, has been known to extend into the pelvis, to be mistaken for a dilatation of the primitive iliac; the consequences of that operation were such as to induce the anxiety of such experiments, that is to say, the patient died. autopsy, a dissecting femoral aneurism was discovered. In spontaneous aneurisms compression is inapplicable.

* This case is reported in
N. D. vol. II. p. 245. Eds.

10 Va. Medical and Surgical Jour-

Let us now examine false aneurisms: here the artery is pierced by a narrow puncture usually. The three tunics remain in contact; the opening remains, and gives issue to the blood, which forms a sac at the expense of the neighbouring cellular tissue. There is no separation of the coats, but only a little orifice connecting the artery with the accidental sac. If we can prevent the blood from issuing, we may hope that a coagulum will form between the lips of the solution of continuity, and become organized and contract adhesions sufficiently firm to obturate it. We may therefore try compression.

To return to our patient; time passed on, motion and sensibility were restored. Innervation was re-established then, and we decided to operate.

Warned by the unfortunate case which I have related, and the catastrophe which took place before my eyes, I resolved to compress the artery above and below the tumour, in order that the injected matter might not pass into the lower divisions of the vessel, and that the undulation coming from the heart might not interfere with the coagulation. Having taken this precaution, I plunged a very fine trocar into the tumour. When the stylet was withdrawn, I moved the canula in different directions; it appeared to be in a cavity, but still the blood did not escape. I then removed it and inserted it again; several drops of dark coloured blood then escaped; it was evident that I had penetrated a soft and recent clot, which could be completely coagulated. I then adapted the syringe, and injected five drops of the perchloride or rather four and a half, for we may suppose that half a drop is expended in welling the interior surface of the canula. The perchloride employed was well prepared. An atom of it placed in contact with the blood which issued on the second puncture, transformed that liquid into a blackish gore or slime. This blackish gore inspired me with no great confidence in the operation I was attempting, for I asked myself what would become of such a magma in an aneurismal sac.

However, compression being removed, it was found that the radial artery no longer pulsated; but it commenced to beat in the course of the day. Very probably small clots had been formed, which were soon disintegrated. The little wounds caused by the trocar had healed readily, and I thought my patient out of danger, when, the fourth or fifth day after the operation, acute pain was experienced in the tumour. At first, this caused no alarm, for the slight inflammation which had arisen might cure the aneurism.

But three days afterwards the pain became unendurable; the sac had become greatly distended, and a blackish spot had appeared upon the tumour. I feared that the sac was about to be ruptured. It was necessary to tie the artery without delay. The inflammatory engorgement rendered the operation quite difficult; nevertheless the vessel was seized and secured. Many days have elapsed since the operation, and there has been no gangrene; the pulsations of the radial have not returned.

In the greater number of cases, when the disease is recent, a ligature above the sac suffices to stop the pulsations, but when the aneu-

rism is of long standing, it is to be feared that a collateral circulation has been established, and that the blood, entering the tumour from below, will necessitate a ligature below. Irritation is one circumstance which favours the development of the small vessels and the prompt formation of collateral circulation. As this was present in the highest degree in this patient, I feared the occurrence of the accident of which I am speaking. Should such an event occur, our conduct is traced out already; it would be necessary to open the sac and to search for its inferior orifice. Perhaps nature will in part accomplish this task. Perhaps the sac will break and discharge the *magma* formed by the perchloride.

Surely in the case I have related, every precaution was taken: compression above and below; injection of *four drops and a half* only, and yet violent inflammation was lighted up, and it was necessary to have recourse to the ligature. My mind is therefore made up on this subject: I formally reject the employment of the perchloride of iron in the treatment of aneurisms. That is my conclusion.—*L'Abeille Médicale*.

[We have thought it well to translate the foregoing observations, because they relate to an important practical point, and contain the opinions in regard to several methods of treating aneurisms of an eminent operator, whose position as professor of operative surgery in the medical school of Paris entitles him to speak with authority. Having been deeply impressed with the murderous effects of the ligature in aneurisms, both by observation and by the frightful mortality exhibited by statistical tables, and being equally convinced of the frequent insufficiency of compression, we have cordially approved the researches undertaken with a view of substituting a new method for the ligature, and have taken care to place before the profession the facts which have been published on the subject. It is right, therefore, that we should also notice the reverses which have attended the application of this method, and the adverse opinions of disinterested judges who have employed it. Hitherto, we must admit with M. Roux, the results of the new mode of treatment have been far from favourable. It remains for further experiment to show whether by careful management this method may be made reliable, or whether we must discard it altogether and return to the ligature. If the latter course is indicated, we trust that the ligature without division of the internal and middle tunics, which has been so brilliantly practiced by M. Roux, Jameson, of Baltimore, and Dr. Hall, of Washington, will be more generally adopted.

Besides the three cases detailed by M. Malgaigne, the reader will find in former numbers of this Journal* cases by Drs. Serre, Niepce, Raoult-Deslongchamps, of aneurisms of the humeral, popliteal, and supra-orbital artery cured by the method of injection. We propose to recapitulate briefly the other instances in which this mode of treatment has been employed:—

M. Alquié's Case.—This military surgeon publishes a case of false

* See *Virginia Med. and Surg. Journal*, vol. I, pp. 62, 315, 318.

aneurism of the ulnar artery in the *Revue thérapeutique du Midi*. The tumour was of the size of a walnut. M. Alquié made a puncture and with an ordinary syringe injected about two grammes of perchloride of iron diluted with an equal quantity of water. The pulsations of the tumour did not disappear. Shortly afterwards erysipelatous redness attacked the whole arm, and the tissues around the tumour were destroyed by phlegmonous inflammation. It was necessary to ligate the brachial. M. Alquié concludes from this case that the "new procedure should be absolutely rejected in practice;" we rather conclude that as all the rules laid down by Dr. Pravaz were neglected, and as a liquid, which will hardly coagulate the blood in a state of repose, was employed, that this case is valueless.

Case of M. Lenoir.—This surgeon, attached to the Hospital Necker, recently operated unsuccessfully by the new method for popliteal aneurism. We find the details of his case in the *Bulletin of the Surgical Society of Paris*.

CASE. Lizoski, 62 years of age, entered the Hospital Necker, the 10th of February 1853, with a popliteal aneurism of the size of a hen's egg, which he attributed to a forced march, undertaken a month previously. The femoral artery was ossified, which rendered the ligature perilous; but the limb not being œdematous, M. Lenoir thought compression applicable. It gave great pain, and, at the end of a month, the tumour appeared larger than before. It was found that by semi-flexing the leg, the pulsations of the aneurism were checked; this position was maintained, though it caused great pain, for one month, without any amelioration.

The injection of perchloride of iron was made, for the first time, on the 19th of May, in the presence of many eminent surgeons, with all the precautions indicated by Dr. Pravaz. It appeared to have no effect whatever.

On the 31st of May a second operation was practised, and 16 drops of the perchloride were injected without any benefit or injury.

On the 18th of June a third operation was undertaken. When the stylet of the trocar was withdrawn, a jet of arterial blood followed it. The syringe of Pravaz, constructed by Charrière, was immediately applied, and 12 drops of the ferruginous injection were forced into the tumour. A firm, filiform coagulum was drawn out from the puncture. The pulsations did not disappear. For six days the patient experienced no bad symptom, but, on the 24th of June, he was seized with pain in the tumour, and a chill followed by fever. Intense inflammation occurred, which could not be arrested by venesection or leeches. On the 28th of June, the patient died. The tumour was found filled with an adherent magma, and surrounded by extravasated blood; the popliteal vein was almost obliterated.

In his remarks upon this case, M. Lenoir dwells particularly upon the difficulty of reaching the column of blood, upon which it is chiefly important to act, with the extremity of the trocar. In puncturing the tumour, M. Lenoir felt the trocar passing through a stratified fibrinous substance, and believed that in his first two operations he did not reach the portion of the sac containing fluid blood. He also expressed the fear, that one of his punctures had wounded the popliteal vein. Notwithstanding this reverse, the eminent surgeon of the Hospital Necker, regards the new method as "destined to render great services, both on

account of the great simplicity of its execution, and by its applicability to cases now considered beyond the resources of art, either on account of their volume or nature."

Professor Roux thought that this case should have been treated by Scarpa's method* of interposing a waxed linen cylinder between the ligature and artery. M. Lenoir replied, that although this procedure had sometimes succeeded in the hands of M. Roux, it was in most cases followed by gangrene and extensive inflammation of the sheath of the vessels.

M. Soulé's two Cases.—M. Soulé, surgeon to St. Andrew's Hospital at Bordeaux, has operated by the method of Pravaz on two occasions. The first patient, aged 36, suffering from secondary syphilis, had a large spontaneous aneurism of the femoral, of two years standing. On the 29th of July, M. Soulé punctured the tumour with a fine trocar; a jet of arterial blood followed the withdrawal of the stylet; the syringe was immediately adapted and six drops of perchloride of iron were injected into the sac. The aneurism became hard and pulseless, and the limb cold and livid, but after a short time pulsation returned, and soon regained its former intensity. On the first of August, a second operation was performed, and a larger quantity of the coagulant was injected. The injection was again unsuccessful, and the artery was accordingly tied, after compression had been attempted in vain.

The second patient presented a false aneurism of the posterior tibial artery behind the internal malleolus. The tumour was no larger than a cherry. The injection of the perchloride failed to produce coagulation. The tumour was laid open and its cavity was filled with lint saturated with *eau Pagliari*; this method was successful.

Mr. Adams' Case.—William Adams, Esq., Surgeon to the London Orthopædic Hospital, reported a case of false aneurism of the posterior tibial artery cured by the injection of the perchloride of iron, at the last meeting of the Medico-chirurgical Society of London. The details of the case, which was perfectly successful, are published in the *Lancet*. So far as we know, this is the only instance in which the method has been practiced in England.

Besides these 11 cases, MM. Marjolin and Guersent have reported several observations illustrative of the hæmostatic effects of the perchloride of iron. M. Follin (*Gaz. des Hôpitaux*, No. 126) and M. Pétrequin (*Gazette Médicale*, No. 40) have employed it successfully in the treatment of varicose veins and erectile tumours. Dr. Brainard, of Chicago, Illinois, has succeeded in curing an erectile tumour of the orbit (*Lancet*, Sept. 1853) by puncture with hot needles, and infiltration of a solution of the lactate of iron.

We have thus presented the facts hitherto reported on this subject. We have no taste for *experimental surgery*, and prefer tranquility of conscience to the glory of innovation in therapeutics. But, while we

* See SELENI, *On the Ligature of Arteries*, *Virginia Med. and Surg. Journal*, vol. I, p. 280.

disapprove of continual experiments with new methods, we believe that modes of treatment which are recommended to men of science by a rational probability that they will prove more efficacious in their action, and less dangerous in their application and consequences than those hitherto employed, should be examined and submitted to clinical experiment. The method of Pravaz, is eminently of this character; it was the result of sixteen years of research on this subject, and is supported by numerous experiments upon animals, and by several successful experiments on man. We are convinced that it will prove a valuable addition to the resources of surgery. It may be modified;—indeed we are a little surprised that surgeons have not already attempted to obliterate the artery between the aneurism and the heart, instead of injecting directly into the sac,—but we believe that the treatment of lesions of the arteries by chemical coagulants, will remain as an established fact in science.—O.]

MATERIA MEDICA AND PHARMACY.

9. *Guano in Cutaneous Diseases.* By Dr. DESMARTIS, of Bordeaux.

Guano is very worthy of the attention of physicians as a remedy in skin diseases. I have experimented with it, and have been struck with the results which I obtained. In a case of pemphigus, the eruption was permanently cured by two or three baths containing sixteen ounces of guano in solution; and I have observed several cases of tinea completely cured by lotions of this substance.

I have also seen cases of psoriasis, and of chronic eczema that had been called incurable, which yielded to a persevering employment of this remedy. By means of collyria, consisting of solutions of guano, I have succeeded in curing radically extensive opacities of the cornea. Leucomas, and even thick albugos have disappeared under this treatment, and the eye has regained its natural transparency.

I have found guano of great service in arresting the excessive supuration and degeneration of tissue occurring in ulcerations of scrofulous subjects; in these cases, however, the lotions, injections, and baths should be very dilute, in order to avoid pain and severe irritation in the ulcerated surface.

In open cancer, guano causes great pain unless it is very much diluted; it acts as an astringent, however, in contracting these ulcers, and prevents the development of the erysipelas which is so frequently manifested in their vicinity.

Although the curative agents contained in guano enter the economy by absorption, yet it is still proper to administer internal remedies: the iodide of sulphur in the case of favus; Donovan's solution, or ar-

senious acid in certain grave herpatic affections; iron and iodine in scrofula; mercury and iodide of potassium in syphilis, etc., and purgatives in all cases.

What is the active principle in guano? We cannot say with precision: It contains potash and lime, which may act as detergent and siccativ; ammonia, which stimulates the skin; oxide of iron, an excellent tonic; a fatty substance; uric, oxalic, and phosphoric acids.

When guano is prescribed in skin-diseases, sixteen ounces are usually dissolved in a bath.

In lotions, we must be governed by the inflammatory condition of the diseased parts. From one to four ounces of guano to a pint of water is the proper proportion. The lotion should be boiled and filtered. It then assumes a clear golden colour. An ointment may be made with a drachm of guano to an ounce of lard.

M. Recamier was the first to recommend baths of guano; that celebrated practitioner has employed them with the best results. For my part, I am convinced that they are destined to render immense services, not in the place of sulphur baths, or as succedanea to these; we believe that both remedies have their distinct applications.—*Revue Thérapeutique du Midi*.

10. *Unguentum Pyroligni Juneperi*.

Mr. E. Wilson has furnished us with the formula for this preparation, which he has used with success in some cutaneous disorders:—

R. Cerae flavæ, ℥i.,
Adipis ppt., ℥vj.,
Sevi ppt., ℥vj.,
Olei juneperi pyrolig., ℥xvj. Misc.

The pyroligneous oil of juniper, or juniper tar, is obtained by the destructive distillation of juniper wood. It is called in France *Huile de Cade*. It is not prepared in this country, but may be procured of Dr. Meidenach of Aix-la-Chapelle.—*Pharmaceutical Journal*.

OBSTETRICS, ETC.

11. *A Case of Pregnancy complicated with Cancer of the Uterus, protracted until the Seventeenth Month.* By Dr. MENZIES.

[This case, which we find reported in the *Glasgow Medical Journal*, No. 2, appears to us to present several points of interest.]

CASE. Towards the end of February, 1852, Dr. Menzies was requested to visit a lady of about 28 years, tall and lean, who had been married five

years and was the mother of one child. The lady informed him that she was soon to be confined, indeed she was astonished that her accouchment had not already occurred. She complained of acute pain in the upper portion of the left inguinal region; this pain had commenced three days previously, and had continued ever since; it was exasperated by the slightest pressure, and forced the patient to remain in a recumbent posture. The physiognomy was anxious, the tongue loaded, the bowels constipated, the pulse at 104. (*Leeches to the seat of pain; pitch plaster; calomel, gr. v., followed by castor oil and tincture of hyoscyamus.*) Amelioration.

In the latter part of March, Dr. Menzies was summoned by the information that labour had commenced. He found the patient in bed, complaining of pains commencing in the centre of the abdomen, and extending towards the hypogastrium. The pains were infrequent; they had lasted twenty hours. The uterus was prominent; there was a depression on either side of it; it was very firm to the touch; the os was closed; the vagina was moist. The countenance was anxious, the pulse frequent and feeble.

Upon enquiry, Dr. Menzies learned the following particulars: In April, 1851, while nursing her first child, at that time twelve months old, the catamenia appeared for the first time after her delivery; the next month they failed to return. The patient experienced some anxieties and mental distress before the date of this second conception, but, during her pregnancy, she observed nothing remarkable until the middle of the following February. At that period, the movements of the fœtus, which had been first felt in October 1851, and which had been much more violent than in the first pregnancy, ceased entirely. There was a sense of weight and coldness in the abdomen, and the breasts, hitherto firm and voluminous, became small and flaccid.

The abdominal tumour was of a well-marked ovoid form; fluctuation could be detected in some places; everywhere percussion gave a flat sound. The most careful auscultation failed to detect either the placental souffle or the sound of the fœtal heart. By the vagina, the uterus appeared firm and elastic; the child's head could not be felt through its anterior wall. The urine was voided naturally; defecation was painful. The patient had been long subject to dyspnœa, and was now afflicted with loss of appetite and gastric irritability.

The abdominal and dorsal pains continued with greater force and frequency during the night and following day, without exerting any effect upon the neck, and finally subsided somewhat.

From this period until the end of April, the local and general irritation continued to diminish, but in the latter half of the month the pains returned. The uterus had now descended a little; the os was somewhat open and the finger penetrated a third of an inch into the cavity of the cervix. A sound was pushed fully an inch into the uterine cavity without rupturing the membranes. Dr. Menzies then determined to attempt the dilatation of the neck by means of the prepared sponge. This was followed in five hours by the loss of twelve ounces of blood; the finger then discovered a flattened, semi-cartilaginous mass, surrounding the anterior lip of the cervix. This was thought to be the placenta, condensed by some pathological cause. The hæmorrhage was arrested by the tampon and by cold applications to the vulva, but the pains continued for two days, without acting, however, upon the neck.

Dr. Patterson, being called in consultation, considered the mass above the cervix a tumour rather than an altered placenta. The patient's complexion led to the suspicion of organic disease. As the child was evidently dead, it was determined to wait, and to sustain the strength by tonics.

About a week afterwards, an attentive examination demonstrated that

the cervix was not completely obliterated; and that what appeared to be an indurated placenta was the anterior lip of the internal orifice, thickened by interstitial deposit. There was no foetid discharge. A speculum examination was not allowed.

During the succeeding five months, the pains continued, but with less intensity than at first; they were augmented towards evening. Gradually they assumed a more variable character; lancinating pains were felt in the hypogaster, sacrum, crural and sciatic nerves. During the last two months of her disease, the patient complained of a constant sensation of weakness, heat, and dragging in the loins, and was unable to sit up for any length of time.

The uterine tumour gradually became smaller, firmer and less fluctuating. Finally, the os nearly reached the perineum, and defecation and micturition became painful and difficult. The breasts, which had been flaccid, filled up towards the end of June, and until the end of the disease, secreted a quantity of milk, which constantly moistened the chemise.

The 3d of November, the physician discovered a sub-acute peritonitis. Death occurred on the 17th of the same month.

Autopsy.—Upon incising the walls of the abdomen, a considerable quantity of gas escaped. The peritoneum was highly congested, and contained about 8 ounces of turbid serum mingled with flaky lymph. The inflammation occupied the whole serous surface, but was very intense opposite the fundus of the uterus. A vertical incision into the womb, gave exit to foetid gas, and displayed the head and shoulders of a foetus at term. The body was not decomposed, the skin was of its normal colour, and the epidermis was adherent. The foetus was closely embraced by the uterine walls, the amniotic liquid being completely absorbed; the head had assumed a cuboid shape in consequence of the compression. The placenta was of greater density than usual; it was attached to the left side; the membranes had almost entirely disappeared.

The uterus contained about 10 ounces of an horribly foetid, thick liquid. Its mucous membrane was injected and softened. The uterine orifice admitted a quill; it was obstructed by a soft substance, which had doubtless prevented the escape of the waters. The os was as hard as cartilage, it was cut with difficulty, and was of a bluish white colour. This dense tissue was infiltrated through the muscular and areolar structure of the womb, and formed spots and nodosities. At the inferior portion the muscular tissue was completely atrophied; in the middle the fibres were more distinct, and the fundus itself seemed even thicker than usual. At this point a little fluid was discovered of an opaline hue, which presented under the microscope a great quantity of granules and some spherical, fusiform, and irregular cells.

There are many examples of gestation prolonged beyond the tenth month, but the foetus was present in the uterus in very few of these cases. In most cases of protracted pregnancy the foetus is either extra-uterine or encysted. The only cause, probably, which can greatly prolong the duration of intra-uterine pregnancy is cancerous degeneration of the cervix. A remarkable case of this sort has been lately reported in the medical journals, in which the foetus was expelled by piece-meal during the three months which followed the ordinary term of gestation. Dr. Menzies believes the case which he reports to be another example of this effect of cancer. An analysis of thirty cases of pregnancy complicated with cancer, collected by Puchelt, and

twenty published since, proves that this is only an exceptional consequence of cancer of the womb, for only one of these fifty cases transgressed the ordinary period of gestation.

It has long been known that conception is not incompatible with incipient or even ulcerated cancer of the neck or orifice of the womb, and also that this condition predisposed to abortion. In 120 cases observed by Dr. Lever at Guy's Hospital, abortion occurred in over 40. When the foetus reaches the full term, the labour is difficult in proportion to the advancement of the disease. Sometimes the obstacle to delivery is insurmountable, and the womb is ruptured. This accident has occurred in one-fourth of the cases recently reported. Of 30 cases of cancer observed by Puchelt, and 7 cases of cauliflower excrescence, 5 died before delivery, and 4 of rupture of the uterus. Of 32 cases in which delivery was effected by nature or by the forceps, 16 succumbed during or soon after labour, 13 survived, and the fate of 3 is unknown. In 20 cases published since the memoir of Puchelt, 4 died before delivery, and 10 during or shortly after labour. The neck was torn in 3 of these cases; in one case, a large disk was detached from the inferior portion of the uterus; the mother lived for six months after this accident. The uterus was ruptured in 3 cases.

The results are scarcely less disastrous for the child than for the mother. In 61 cases, from which 5 must be subtracted, nothing being recorded of the viability of the child, 18 infants only were born alive, and in most of these cases, the carcinoma occupied only one lip of the cervix.

Dr. Menzies next reviews the therapeutical indications in these hopeless cases. Inasmuch as death is rare when abortion occurs, many physicians have proposed the induction of premature labour. It is an established fact, however, that delivery accelerates the progress of the disease, which seems to be retarded by gestation. Still, the author believes that abortion induced by the method of Kiwisch, may prolong life in some cases.

If the physician is not called until labour is commenced and the uterine contractions are insufficient to effect delivery, and the patient is menaced with rupture of the womb or death by exhaustion, he has to choose between several operations.

Version has been frequently practiced and has caused the death of the mother and child in every case.

The forceps has been employed with success in two instances, but its use is limited to those cases in which a portion of the neck only is affected.

Craniotomy and embryotomy have also their partizans. In 24 recent cases, the first was practiced in 3, and the second in 4 cases; one woman died immediately, and another two days after the craniotomy, the third patient lived a month. As to embryotomy, one patient succumbed under the operation, the other survived, and the foetus was discharged by fragments, during the three succeeding months.

Excision is only adapted to those cases in which the thickening of tissue is limited to a portion of the uterine orifice; it has been rarely

performed. Mr. Arnott, on one occasion, removed a malignant tumour from the anterior lip, and extracted rapidly a living child; the mother survived sixteen months.

Incisions of the cervix were practiced in 1 of the 24 cases cited. The patient had been in a desperate condition; two or three small incisions permitted the head to pass, and five contractions effected delivery. The woman died three days afterwards. Professor Simpson, who reports this case, has himself incised a carcinomatous mass in the vagina of another woman, and delivered a living child by the forceps. The woman lived two years afterwards. Incisions having frequently succeeded in simple induration of the neck, it is rational to feel some confidence in their utility in organic induration. They are recommended by Naegele, Ashwell, Baudelocque, Lee, Levret, Gooch, and Simpson, and it is probable that many cases in which death resulted from rupture would not have had this unhappy termination if sections had been made. Oldham and others pretend that they are applicable only to those cases in which the cancerous affection is slight, and that in other cases, the Cæsarian section or craniotomy must be performed. Dr. Menzies, on the contrary, prefers the practice of incising the neck, and remarks that he should not hesitate, in a case similar to that which he has reported, to operate in this manner.

We give a succinct analysis of the table which terminates Dr. Menzies' paper, and includes 27 cases of delivery after the seventh month in women with cancer of the uterus:

In these 27 cases, the mother recovered in 7 only; the child was saved in 8 cases. Dr. Lever reports 5 of the 7 fortunate cases. In the first, the patient had already been delivered eleven times; the cancer occupied the anterior lip; the mother and child were saved. In the second case, the posterior lip was affected; after a labour of sixty hours, a living child was born. The third, fourth, and fifth cases related to the same patient, who had already two children. In her third pregnancy, four or five small tubercles were discovered on the anterior lip. She bore a living child. In the following pregnancy, the tubercles were larger; the child died. In the fifth labour, the child was preserved. Dr. Butler reports a case in which two-thirds of the circumference of the neck was occupied by cancer, and in which delivery was effected with the forceps. The mother and child lived. The same table reports a case in which the mother recovered after embryotomy.

Death occurred in 20 out of 27 cases, or nearly three-fourths. In 5 instances the mother died before delivery: in the first case, the whole neck was ulcerated; there had been 7 previous accouchments; in the second case, reported by Dr. Oldham, the cervix was also ulcerated, and the uterus was ruptured during labour. The other cases present nothing remarkable. The infant perished in every case.

In 6 cases, death occurred shortly after delivery. In 1 of these, the patient was 90 hours in labour; the cervix was entirely ulcerated, and the child was delivered through the abdominal walls; this woman died in 5 days of peritonitis.

Lastly, in 9 cases, the patients lived from fifteen days to sixteen

months. Of these, the most curious are the cases already alluded to : 1st, the case of Dr. Lever, in which the whole neck was occupied by ulcerated encephaloid, a great portion of which separated during labour; the patient lived six months ; 2d, the patient of Mr. Arnott, who lived sixteen months. The tumour occupied the anterior lip ; it was excised, and the labour was rapidly terminated.

12. *On the Methods of Exploration in Diseases of the Uterus.* By M. MALGAIGNE.

In a recent clinical lecture, Professor Malgaigne alluded to the evils which may result from a too exclusive reliance upon the speculum in the diagnosis of uterine diseases. Assuredly, he said, the speculum is of great utility ; but it must be confessed, that it is deplorably abused. In many cases, the information derived from the sense of touch cannot be supplied by the sense of vision ; when ocular inspection is employed, the lesions which are observed, however slight they may be, monopolise the attention, and a more thorough examination is neglected.

A woman for example is suffering from an engorgement of the cervix ; the finger can very well recognize the exact form of the part, its degree of development, its consistence, its temperature, etc., all most important indications of treatment. Then the speculum is applied. The neck is immediately deformed by the application of the instrument ; some redness is observed, and, frequently enough, some ulcerations of the inferior lip. From that time the diagnosis is established : ulcerations of the neck of the uterus. What a part in pathology has been played by these too famous ulcerations ! And yet in themselves they have absolutely no importance. The catarrhal secretion of the uterus in a state of chronic inflammation runs upon the posterior lip of the os tincæ, and irritates and excoriates it precisely as the nasal mucus irritates and excoriates the upper lip in coryza. These ulcerations are sometimes accompanied by slight inequalities, which are regarded as morbid granulations of the neck, and they are cauterized. Why cauterize them ? They do not constitute the real disease, but are simply symptomatic phenomena of an inflammatory affection of the uterus. Treat this, and the local disorders will disappear of themselves.

You are often consulted by women, who complain of acute pain in the region of the uterus ; you do not fail to apply the speculum immediately. If there is the slightest redness, the slightest excoriation, both very common accidents in delicate mucous membrans, you think that you have the key to the symptoms experienced by the patient. You institute a special treatment : cauterizations, injections, etc. The redness disappears, the ulcerations close ; you think that all is well ; it is not so by any means. In fact the true lesion is very frequently a displacement of the uterus, an anteversion or a retroversion, more frequently the first than the second. The touch would have told you this ; you have then committed a grave error of diagnosis, and it is the speculum that has deceived you.

Here is a striking example of this :

When I took charge of the service which I direct at the present time, I was consulted by a woman who had experienced acute pain for a long time, which, after an examination by the speculum, had been attributed to ulcerations of the uterine neck; the ulcerations had been cured, as they always are, and the patient was dismissed as cured. Ah well! I said to this woman, you have been cured then?—Assuredly, she replied, I am cured, but of the ulcer only.—Why have you come back?—On account of the pains.—And these pains, you still suffer from them, notwithstanding the cure of the ulcer?—Continually.—And as badly as ever?—Quite as badly. I interrogated her carefully; I learned that when lying down she had no pain. I examined with the finger; there was anteversion. The cause of the pains was no longer a secret; I ordered a bandage; and this time she left the hospital cured, but really cured.

How was the error committed? In this way: when the speculum is applied, the woman is on her back; in this position the uterus reduces itself, and moreover, in searching with the instrument for the neck in the direction of the axis of the vagina, we forget to incline the speculum forwards or backwards, and accordingly the cervix is deviated, which is as much as to say that the fundus is deviated in an opposite direction. This is indubitably a frequent source of error.

At the great academical discussion upon affections of the uterus which took place in 1852, M. Velpeau advanced this proposition, that anteflexions and retroflexions of the uterus were generally mistaken. The very next day, I examined all the women with diseases of the womb who were in my wards and I found two of these deviations which I had mistaken, afterwards, as I thought at first, a third; but as I shall tell you, I soon discovered my error.

In cases in which the uterus is only inclined, the touch promptly informs you of its situation; the neck is found directed backwards. You follow the body and you soon find that the fundus looks forwards: there is anteversion. If the neck is forwards, the body is backwards; this is easily recognized. But where the uterus is bent upon itself, the neck often remains in the axis of the vagina. Upon touching, it is found in its ordinary position, and the investigation is carried no further. This is wrong, for a grave error of diagnosis may be committed, by not determining the existence of an inflexion. It is sometimes difficult to circumscribe the body of the uterus, especially when this organ is situated high up. The index does not reach far enough; the other fingers resting against the perineum prevent it from penetrating to a sufficient depth. In this case you must have some one to push your elbow; the perineum can then be pushed back, and the body can be reached. Another excellent method is to place the woman in an erect posture. The weight of the viscera then causes the uterus to descend; the surgeon then kneels on the left knee, and supports his elbow upon the right knee, whilst the woman presses upon

the hand employed in touching. This method allows the position of parts to be determined with great exactness.

In retroflexion there is a source of error which you should recollect: The neck is in the axis of the vagina, but you feel a hard round body behind. You must then examine by the rectum, for hardened fæces, scybala, as they are called, when felt through the vagina, are often taken for the uterus. This happened to me in one of the three women of whom I just spoke to you. I thought I felt a retroflexion, but a purgative, which I administered designedly, destroyed the pretended incurvation, and taught me how easy it is to be led into error in these explorations. What is the part of the speculum in all these cases? Very slight indeed; unless my finger discovers inequalities and fissures upon the uterine neck, I let it alone; but if I find well-marked local disorders, then I look.

The introduction of this instrument is not perfectly innocent. I have seen chronic inflammations which would have been cured in a short time by rest and antiphlogistics, *eternalized* by the reiterated introduction of the speculum.

CONCLUSION: The employment of the speculum should be greatly restricted; it should only be applied in cases in which the touch discovers lesions which cannot be accurately determined except by ocular inspection, and then this method of exploration should be repeated as rarely as possible.—*Gazette des Hôpitaux*, No 128.

13. *Fatty Degeneration.* By R. D. LYONS, M. B., etc.

There appears to be good reason to believe that the process of fatty degeneration is the mode by which the uterus *post partum* is restored to its normal dimensions. Prof. Retzius has already investigated this subject; and more recently a memoir has been devoted to it by Dr. Heschl.* This author states that the proper substance of the uterus undergoes so complete a transformation into molecular fat, that not one single fibre of the organ existing previous to child-birth remains behind. This transformation he has not observed to commence before the fourth or sixth days, and not later than the eighth. In the single muscular fibres, the process begins in many points at once; the outlines become pale, and there appear yellow granules, which, when the ends of the fibre cells are thin, lead to their early dissolution.—*Annals of Micrology*.

14. *On the Causes and Treatment of the Albuminuria and Convulsions of Pregnant Women.* By M. EDOUARD ROBIN.

M. Robin has addressed to the French Academy of Sciences a memoir entitled:—*Reflections upon the causes and treatment of the albuminuria and eclampsia of pregnant women; a new interpretation of*

* *Researches on the Condition of the Uterus after Delivery*, by Dr. R. Heschl, Vienna, translated from the German. Dublin. 1853.

the paroxysms and consequences of eclampsia ;—the mode of action of the remedies used in the treatment of nervous diseases.

This essay contains new applications of the general results at which the author has arrived by studying, from a physiological and pathological point of view, the modifications of hæmatisation, and the part which agents moderating slow combustion play in the living organism. The new facts which he presents confirm, in his opinion, the views he has already announced, according to which the compounds which produce an anæsthetic condition of blood, enjoy this property because they exercise upon the living organism an action similar to that which they exert upon dead animal or vegetable matters, which they preserve from putrefaction, that is, from slow combustion.—*Comptes Rendus de l'Institut.*

DIETETICS.

15. *Some Observations on Fish in relation to Diet.* By JOHN DAVY, M. D., F. R. S., Inspector general of Army Hospitals; read before the Royal Society of Edinburgh, 18th April 1853.

What are the nutritive qualities of fish compared with other kinds of animal food? Do different species of fish differ materially in degree, in nutritive power? Have fish, as food, any peculiar or special properties?

These are the questions submitted for consideration by the author of this paper, and he proceeds to ascertain the nutritive properties of fish as compared with other kinds of animal food, by first comparing the specific gravity of each article experimented on, and then expelling all of the aqueous portions to obtain the amount of solid matter in each.

The author presents two tables, representing the varieties of fish in common use, compared with other kinds of animal food, as to their specific gravities and their per cent. of solid matter. These tables show that the salmon and mackerel contain the greatest amount of nutritive power amongst the fish tribe, and compare very fairly, both in specific gravity and amount of solid matter, with beef, pork, and mutton. On contrasting *seriatim* the first table with the second, the degree of difference of nutritive power between fish, and other articles of animal food, appears to be very inconsiderable, hardly in accordance with popular and long received notions.

With regard to the peculiar qualities of fish as articles of diet; Dr. Davy gives some very interesting suggestions, more especially, as to the use of fish as a diet for the prevention of scrofulous and tubercular disease. He states that at the public dispensary at Plymouth, it ap-

pears that of 654 cases of phthisis entered on the register ; there were only *four* found belonging to the families of fishermen, which is in the ratio of one to 163·2. Dr. Cookworthy, the physician to the institution, states that had he taken scrofula in all its forms, the result would have been more conclusive.

Such a degree of exemption as this return indicates in the instance of fishermen is certainly very remarkable,* and deserving of attention, especially considering the prevalency of tubercular consumption. Not only in the working classes in Great Britain, but also amongst the regular troops, whether serving at home or abroad, and having an allowance of meat daily, but rarely tasting fish—for instance ; in 1205 cases, not selected, at the General Hospital, Chatham, tubercles were found in 734, equal to 61·7 per cent.

The author presumes then, that there enters into the composition of fish some element, not common to other kinds of food, which thus renders it prophylactic in tuberculous and scrofulous disease, and he considers that element to be iodine. He states that he has found this principle in every sea-fish he has examined in decided quantities. Amongst others he names the mackerel, cod, herring, salmon and trout. He has also detected it in the crab, lobster, and oyster ; he therefore concludes that the fish diet, like cod liver oil, owes its virtues to iodine, and mitigates if it does not cure pulmonary consumption.

Dr. Davy hence advises that salt water fish, thoroughly dried, from which even their hygroscopic water should be excluded, be prepared for the use of the army, and especially for those points where that terrible malady, goitre, exists, to be largely used as an article of diet. Goitre, he states, has never been known to exist in seaports, or with inhabitants of sea-coasts.

The author closes his paper with the remarkable statistical fact, that among 763 fishermen and pilots, and 608 shoemakers and cordwainers in Plymouth, it is found upon consulting the dispensary returns, that the total number of shoemakers who have died with tubercular disease has been 37 ; whereas, the total number of deaths from the same disease amongst the fishermen, the more numerous of the two, was, as we have seen, only four.—*Condensed from Edinburgh Philosophical Journal.*

*It will be recollected that our collaborator, Dr. G. L. Upshur, has remarked in a recent article in this Journal upon the extreme rarity of tubercular disease in the Marine Hospital under his control.

THERAPEUTICAL RECORD.

Anasarca.—Dr. Gintrac (*Journ. de Méd. de Bourdeaux*) reports a case of ascites and general anasarca supervening upon intermittent fever, which, after resisting treatment by nitrate and acetate of potash and digitalis, squill, scammony, gamboge, etc., was relieved by sulphate of manganese. It is already known that good results have been obtained from the cholagogue action of this remedy, in the jaundice which often follows miasmatic fevers.

Aneurism.—Dr. Gairdner publishes his views (*Edinburgh Monthly Journal*, February 1853,) on the spasmodic dyspnoea, often of the laryngeal type, which frequently accompanies aneurisms of the arch of the aorta, and depends, according to the author, upon irritation of the pneumogastric and recurrent nerves, rather than upon direct compression of the air-passages. Dr. Gairdner reports four cases, from an analysis of which he concludes that aortic aneurism may give rise to three paroxysmal affections: laryngismus, asthma, and angina pectoris. Dr. Gairdner believes that tracheotomy may be employed with advantage in those numerous cases of aneurism of the cross of the aorta in which the othopnoea is extreme; in one of the cases reported by him, this operation prolonged the patient's life twelve days.

Bubo.—Dr. W. B. Hazlett, of Wheeling, Va., advises (*Med. Examiner*, August 1853,) that suppurating syphilitic bubo should be treated by the injection of a solution of nitrate of silver (gr. xxv. to ℥j.), with a view of obtaining adhesive inflammation, instead of the old method of destroying the skin by the knife or potassa fusa, and awaiting the tedious process of granulation.

Cholera.—Dr. Owen Rees (*Lancet*, Dec. 1853) refers to the beneficial effects which resulted from saline injections into the veins in the last epidemic of cholera. He believes that if the injected fluids had been composed in accordance with the chemical and physical constitution of the blood, the advantages of this practice would be more frequent and permanent. Vogel's analysis of the blood and dejections of cholera patients indicate the necessity of supplying more salts and water. Dr. Rees accordingly recommends that the following powder should be kept in readiness:—Chloride of sodium, ℥ij; phosphate of soda, ℥j; carbonate of soda, ℥jss; sulphate of soda, ℥ss. A portion of this powder should be gradually added to distilled water at 98° Fahr., until the fluid is brought to a specific gravity of 103°. It is then ready for use. An improper specific gravity endangers the integrity of the blood corpuscles.

Elephantiasis of the Greeks.—Dr. Boileau, a physician residing in

the island of Mauritius, writes to the *Moniteur des Hôpitaux*, that a remedy has been found for this hitherto incurable disease in the *bevilacqua*, or *hydrocotylus asiatica*, a plant of the family of the umbellifera. Dr. Boileau was himself a victim to this frightful disease, and, anticipating a certain and cruel death, he experimented with this and other plants. Besides his own cure, Dr. Boileau cites in favour of the new remedy, the amelioration experienced by 57 patients in the civil hospital of Mauritius. He would consider three of these cases cured, was he not acquainted with the tendency to relapse observed in elephantiasis. The powder of the whole plant is the form of administration employed by Dr. Boileau and his colleagues.

Epiphora.—Our readers probably recollect the paper published by Mr. Bowman on this subject, in which many cases of lacrymation were attributed to a defective position of the inferior lacrymal punctum. We find (*Edinburgh Monthly Journal*, Sept. 1853) that Mr. B. Bell has practised the operation recommended by Mr. Bowman, which consists in slitting open the canal from the punctum to a point in apposition with the ocular conjunctiva, and keeping the wound open with a probe, thus forming a sort of groove for the tears. In one of his three cases Mr. Bell was perfectly successful.

Entropion.—At a recent meeting of the Surgical Society of Paris, M. Marjolin presented a patient, who had been affected with inversion of right lower lid. After getting rid of the inflammation which was present, M. Marjolin simply pinched up a transverse fold of the integument of the lid and secured it with a *serre-fine* (little silver forceps). The instrument fell off in a fortnight, leaving no trace of the entropion.

Mammary Abscess.—Dr. Stewart of Salisbury, Pa., (*Med. Examiner*,) reports several cases in which he believed that the application of iodine ointment to inflamed breasts prevented the occurrence of suppuration. After a few applications of the ointment, the “large, heavy and inflamed” mammæ, became “perfectly flaccid, completely cool, and admitted of the freest palpation and handling.”

Menorrhagia.—Dr. Tanner (*London Lancet*, Dec. 1853) states that in those cases of increased catamenial flow unconnected with physical alterations, plethora, or a watery state of the blood, in which rest and the usual astringents are unavailing, he has derived great advantage from the tincture of cinnamon. It is well known, Dr. Pereira regarded cinnamon as having a direct action upon the uterus, and Dr. Tanner is convinced that its utility in these cases depends upon this special property, and not upon its general specific action. The medicine is given in drachm doses, cinnamon-water being the vehicle. Its use should be continued for fourteen days after the disappearance of the symptoms.

Paraplegia.—In treating of that form of paraplegia connected with exhaustion, which is often caused by chlorosis, anæmia, onanism, excessive coition, etc., M. Trousseau recommends (*Ann. medico-psycholog-*

iques) frictions, flagellation, urtication, cold affusion, and the internal employment of ferruginous preparations and bitter tonics. If these means are unavailing, the practitioner should have recourse to a remedy proposed by Dufrénoy, of Valenciennes, in paraplegia occasioned by the retrocession of dartrous eruptions; this is the extract of *rhus radicans* (*toxicodendron*), prepared from the unpurified juice of that plant. MM. Brettonneau and Trousseau administer this medicine prepared in pills: extract of toxicodendron, ℥v.; inert excipient, q. s.; make 25 pills. The dose is gradually increased until sixteen pills are taken daily.

Tooth-Ache.—A German Journal recapitulates the following formulæ, which may be used with advantage in dental caries: R. Opii et camphoræ, ana, gr. x; spiritus vini rect., q. s.; Olii papaveris et cajaputi, ana, gtt. 3j; M. This is Dr. Copeland's formula. R. Spir. vini rect. et creosoti, ana, 3vj; tinct. cocci, 3ij; olei menthæ, gtt. xii. M. (Righini). R. Aluminis pulverizati, 3j; alcoholis et spir. ætheris nitrici, ana, 3iij. M. (Blake). Cottereau advises a solution of camphor in ether with a little ammonia; Barruel employs a mixture of ether and chloroform. All of these recipes are employed in the same way; a piece of cotton or lint moistened with one or other of the liquids is placed in the cavity of the tooth.

Scrofula.—Mr. Taylor (*Lancet*, Dec. 1853) observes that it has been incorrectly believed that there were no remedial properties in proteine. In strumous affections he has obtained the best results from the administration of three grains of proteine, *ter die*.

Tenoraphy.—Professor Sédillot, of Strasbourg, reports (*Gazette des Hôpitaux*, Nov. 1st) a case of sabre wound of the fore-arm in which the extensor tendons were divided. The wound healed by the first intention, leaving the third and little fingers inextensible. Dr. Sédillot one month afterwards cut down upon the cicatrix and united the divided extremities of the extensor communis by a stitch; the extensor proprius was, singularly enough, wanting. The wound healed kindly, the suture came away on the seventh day, the fingers which had been paralyzed resumed their functions, and the patient's hand became as strong as ever.

EDITORIAL AND MISCELLANEOUS.

The associate editor, in entering on his duties, which he does in this number may be permitted to hope, that a familiarity with the necessities of the Virginia profession for the past ten years will enable him materially to assist his colleague in placing this Journal prominently before them as the representative of their interests, feelings and desires, and he believes if the profession can be aroused to the importance of the duty which devolves on them, to contribute their due proportion to the common fund of medical science, and if their hearty support and co-operation can be obtained in this effort to build up in the south a literature of our own, that the Virginia Medical and Surgical Journal will do no discredit to itself and bring no disgrace on them, but rather contribute powerfully to add to their usefulness and reputation at home, and assist in elevating the dignity and character of southern medical men to that high position in the eye of the public, to which it is justly entitled.

At this genial and jocund season, when your hearts are gay and joyous, and your tables loaded with good cheer; may we not, good friend and patron, introduce to you our bantling, the Virginia Medical and Surgical Journal, as you bring in your children after dinner to take dessert and a glass of wine, and let it wish to you all in good old Virginia fashion, *A happy New Year.*

In truth, we hope that you will excuse us if we descant some little on the merits of our progeny; for though it is only nine months old, having been born in April last, yet so lusty and vigorous has it become, that we've had, (as you see,) to call in the aid of another nurse, the effect of which, we hope, will be to add to the rapidity of its growth and increase its efficiency and usefulness.

Our babe is quite a prodigy indeed, for it learned to talk at the early age of one month, and we earnestly hope, that we have not neglected that parental duty of teaching its lisping accents to utter only

the words of truth and honour, and not permitted its language to be made the vehicle of selfish or sordid sentiments.

Not only has it thus early acquired its mother tongue, but its knowledge of the modern languages has been sufficiently good to have given you various translations of such essays and tracts, as we hope you have found useful and instructive. At this early period of life our youngster is quite a travelled gentleman, and may be said to be as fast as any young American would desire; for it always travels *with the mail*, and is familiar with the whole country from Maine to Georgia, has crossed the Atlantic in the shortest possible time, has seen St. Bartholomew, and Hôtel-Dieu, and even ventured as far as Berlin and Vienna.

The *dress* of our little one is always scrupulously neat, with clean face and a nice jacket; *that* it owes to the dexterity and skill of *Messrs. Colin and Nowlan*; and we only hope that the principles we advocate will be always as pure as the paper on which they are printed, and that our ideas and thoughts may be as neatly expressed and as well ordered as the type in which they are set. Is it too much to hope then, dear reader, that you will not only be yourself a useful contributor, but will give us your influence and energy to enlarge our subscription list, and thus help us to take care of this hearty young one, who requires a good deal to support and maintain it, and who will endeavour to repay your kindness by earnestly labouring in your behalf.

A State Medical School.

It has been ascertained that the plan of organization of a central and efficient medical school, proposed and cordially approved by the Virginia Medical Society at its last meeting, cannot be realized, in consequence of the constitutional provision which prevents judges of the Court of Appeals from holding "offices of public trust."

We presume, however, that the members of the Society, like ourselves, supported this scheme chiefly because it was the only definite project of a liberal character which had as yet been proposed, and that their influence will equally be exerted in behalf of any other plan of this nature. We sincerely hope that some fair and liberal project may be devised, which may reconcile conflicting interests, and enable the profession to unite in harmonious action.

We are glad to find that, however opinions may differ as to the best mode of establishing a State Medical College, there appears to be but one sentiment in regard to its importance. We have recently received a communication from Dr. Bolton, of Richmond, who was one of the opponents of the project submitted by the committee of the State Medical Society, in which our esteemed colleague expresses the fear that the brief sketch of his remarks at the late meeting of the Society, contained in the November number of this Journal, might be misapprehended. While opposing the particular plan proposed by the committee, Dr. Bolton did not mean to assert that a respectable medical school could not be established in Richmond. He believes, on the contrary, that an institution organized on liberal principles would be cordially sustained by the profession at large, and would gladly lend his support and influence to any plan, which, in his opinion, seemed likely to effect these desirable objects.

A State Medical College Again.

Virginia furnishes annually about three hundred students to the various medical schools of the country. It is obvious that if this number of pupils could be collected at a single institution within the State, we should have a prosperous college. Half of them have heretofore attended northern institutions; the remainder have been distributed among the schools of Charlottesville, Farmville, Richmond and Winchester. It will hardly be denied that the cause of medical education has suffered by this dispersion.

Deeply impressed with the fact that physicians can never assume their true position, until their ranks are uniformly recruited by men of capacity and honour, the conductors of this Journal have advocated, from its foundation, the establishment of a *Medical College of Virginia*, to which all other medical schools should be subsidiary, and which, in connection with an *Examining Board*, should possess the exclusive power of conferring the right to practice medicine in the Commonwealth.

It appears, however, that such a monopoly is considered incompatible with our "republican institutions," and quite unacceptable to the legislature, however agreeable to the profession.

The professors of the medical school in Richmond, have petitioned

the general assembly to constitute *them* the *Medical College of Virginia*, and the following bill, it is said, has been presented to the committee on schools and colleges, with a view of effecting this object. It will be observed that it does not contemplate precisely such an organization as we have advocated.

BILL.

Whereas, The faculty of the medical department of Hampden Sidney college have built up and sustained within the Commonwealth a medical school of reputation and usefulness, which deserves the fostering care of the general assembly; and

Whereas, It is represented to the general assembly that the said faculty desire an independent charter,—therefore,

1st. Be it enacted by the general assembly of Virginia, That the professors hereinafter named, and their lawful successors, shall be, and are hereby made a body politic and corporate, under the name and style of the medical college of Virginia, for the purpose of giving instruction in medicine, surgery, and the other arts and sciences connected therewith; and the said corporation is hereby invested with all the rights, powers, and privileges conferred by the Code upon corporations, and subject to all the rules, regulations, and restrictions, and provisions of the Code, in regard to corporations, so far as the same are applicable to such a corporation as that hereby created.

2d. There shall be, and is hereby vested in the said corporation, all the property, real and personal, which now belongs to the medical college at Richmond, or to the faculty of the medical department of Hampden Sidney college, including the college lot, buildings, and appurtenances, and the furniture, philosophical apparatus, anatomical museum, &c., subject, however, so far as the said real estate is concerned to the lien which now exists thereon in favor of the president and directors of the literary fund.

3d. The professors or faculty of the medical college shall be for the present those who now occupy the several chairs in the college, that is to say, Richard Bohannon, M. D., shall be professor of obstetrics and diseases of women and children; Lewis W. Chamberlayne, M. D., of materia medica and therapeutics; Charles Bell Gibson, of surgery and surgical anatomy; Carter P. Johnson, of anatomy and physiology; David H. Tucker, of the theory and practice of medicine; and Martin P. Scott, of chemistry and pharmacy.

Every vacancy in a professorship, caused by the death, resignation, removal, or permanent disability of a professor, or by the creation of a new chair, shall be filled by a board of visitors herein provided for; but temporary vacancies, such as those caused by the temporary absence or sickness of a professor, may be filled or provided for by the faculty.

There shall also be a demonstrator of anatomy, appointed by the faculty, and liable to be removed by them.

4th. The faculty shall appoint one of their own members dean, who shall keep a record of all their proceedings, and perform such other duties as may be assigned to him by the faculty. The faculty shall also have the care, control, and management of the property and affairs of the college and infirmary, and the government of the students and subordinate agents and officers, including the power of removing and appointing such agents and officers, subject, however, to such by-laws, rules, and regulations as may be enacted by the board of visitors, in the manner hereinafter mentioned.

5th. There shall be taught in said college all the usual branches of medical education, especially anatomy, surgery, physiology, the theory and practice of medicine, materia medica, therapeutics, midwifery, the diseases of women and children, and chemistry.

6th. The faculty shall, once a year, or oftener, examine candidates for degrees, and may confer the degree of doctor of medicine upon such candidates as

having attended two full courses of medical lectures—one of them, at least, at this college—and having been thoroughly examined by them, and complied with such other regulations, as may be adopted by the faculty, shall be deemed by them worthy of that distinction.

7th. There shall be a board of visitors, fifteen in number, composed of the following persons and their successors, to wit:*

Seven members of this board shall constitute a quorum. The board shall fill vacancies in their own body. But, if at any time the number shall be reduced below a quorum, the vacancy shall be filled by the circuit court of the city of Richmond, or such other court as may succeed to its chancery jurisdiction, either upon a bill filed by the corporation hereby created, in which the attorney general shall be made a defendant, to defend the interests of the commonwealth; or upon a bill filed by the attorney general against the corporation. The costs of which proceeding shall be paid by the corporation.

8th. The board of visitors shall meet once a year, or oftener, at the college, and the necessary expenses of those visitors not residing in Richmond, who attend such meetings shall be paid by the faculty.

They shall appoint a secretary, who shall keep a record of their proceedings, and shall be allowed a salary to be fixed by the board, and paid by the faculty; such salary not to exceed one hundred dollars per annum, without the consent of the faculty.

9th. The college and its affairs shall be subject to the superintendence of the visitors, who shall, at all times, be allowed access to the records of the faculty, their lectures, and the buildings and property of the college; and the board of visitors may, at any time, require from the faculty any information about the affairs of the college or corporation, which it may be in the power of the faculty to communicate. The board may also adopt any by-laws, rules and regulations for the good order and government of the college, its professors, teachers, officers, agents, and students, which they may think fit: Provided the same be proposed beforehand, or agreed to afterwards by resolution of the faculty.

And the board shall not only have the power of appointing the professors given by the 3d section—but may remove any professor for any cause, which may seem to them sufficient; ten visitors at least concurring in the removal; Provided, that the cause or reasons of such removal, and the ayes and noes of such vote, be entered on the record of the board, and that the professor against whom charges may be preferred, shall have had reasonable notice in writing of the specific charges against him, and opportunity of being heard in his defence by proof and argument in open session of the board.

10th. The board of visitors and the faculty, shall each make an annual report to the 2d auditor, such as is required by the 12th section of the 83d chapter of the Code.

This act shall take effect and be in force from the time that it is assented to by resolution of the present faculty; which resolution shall be entered upon the record book, required by the 4th section of this act—and from that time also the corporation hereby created shall be deemed organized.

It is evident that the consummation of this project would effectually defeat the great object which the profession has in view. Instead of

* We understand that the faculty did not pretend to dictate the composition of the board of visitors, but, being asked by the committee what persons they would suggest for these offices, presented, in a separate note, the following list of names:—

Chas. W. Russell of Wheeling, Allen T. Caperton of Monroe, John B. Baldwin of Staunton, Jas. M. Mason of Winchester, John S. Barbour, Jr. of Culpeper, Hunter H. Marshall of Charlotte, M. R. H. Garnett of Essex, Tazewell Taylor of Norfolk, James D. Halyburton of Richmond, Raleigh T. Daniel of Richmond, John M. Patton of Richmond, Wm. H. Maxwell of Richmond, Andrew Johnston of Richmond, Wm. H. Macfarland of Richmond, James A. Seddon of Richmond.

establishing an important institution for medical instruction, liberally governed, cordially supported by the profession, with its honours open to all, it would organize a private local monopoly of the most odious description. We were sadly disappointed by this scheme, for we had thought that the faculty of the school in Richmond were in a more favourable position than any other association to found such an institution as is required by the necessities of the State, and we ardently desired to co-operate with them in accomplishing this beneficent end. Upon the anonymous publication of the above plan, without any denial of its authenticity, we prepared an article designed to call the attention of physicians to its obnoxious features, and to invite the profession to unite with us in resisting to the last extremity the establishment of such a medical oligarchy as was proposed in this bill. Anxious, however, that the present opportunity of establishing a proper system of medical instruction should not be lost, we had a conference with several professors of the school, in which our objections to their project were concisely stated. We have been glad to find a willingness on the part of the faculty to remove the objectionable characteristics of their plan. It will be seen from the following letter, that this has been, in some measure, already done, and we sincerely hope that it may be deemed expedient to modify the project still farther, so that the objections of all disinterested persons may be removed, and the profession may harmoniously support a plan for the common weal.

RICHMOND, January 5th, 1854.

To the Editors of the Va. Med. and Surg. Journal.

GENTLEMEN :

As the new charter for the medical college seems to have excited some comment, it seems but fair that I should state, that the charter presented to the committee, was not supposed by the faculty to have been perfected, but it was expected that such alterations would be made as the true friends of the institution might suggest, since it is the wish of the faculty to make the charter conform, as nearly as possible, to the wishes of the profession throughout the State. The good wishes of the profession are essential to the success of the college, and while the faculty cannot expect to satisfy all, they are determined to use every exertion in their power to prevent cavil and opposition, from those whose good opinion they are desirous of preserving.

I will go farther and say, that the faculty have already agreed to change the charter in several respects: 1st, they are willing that the board of visitors, and not the faculty, shall be constituted the incorporators; 2d, they

desire to give to the visitors more power than is granted to them in the bill presented to the committee of schools and colleges, by striking out the following words, "provided the same be proposed beforehand, or agreed to afterwards, by resolution of the faculty;" 3d, in the formation of the board of visitors, the faculty propose to add to the present number, by selecting one visitor from Petersburg, one from Alexandria, and one from Fredericksburg, so that in a board of nineteen, there will be twelve or more from the interior of the State.

With great respect,

Your ob't serv't,

DAVID H. TUCKER, *Dean.*

Our readers will observe that, instead of a private corporation of six physicians, the faculty *now* asks for the appointment of a board of nineteen governors, composed of men of standing selected from every portion of the state, and are willing that this body shall be invested with full powers in all that concerns the proposed college. This is certainly a vast improvement.

As we have already stated, we believe that the faculty of the school in Richmond possesses the ability to organize such an institution as the profession demands. Should this be attempted by any other association, we should have two schools, and all the evils of competition in teaching. Encouraged by the assurances we have received of the willingness of the faculty to modify their charter until it is made unobjectionable to the mass of the profession, we shall proceed to offer one or two farther suggestions for its improvement.

In the first place, the "self-perpetuating feature" in the organization of the board of visitors, may be advantageously removed. We are aware of the difficulty of selecting a disinterested appointing power, but anything is preferable to the power of self-appointment, and if the proposed institution is to be a *Medical College of Virginia*, it should be attached in some way to the state; either by requiring the president and directors of the literary fund, who control the appropriations for literary affairs, or else the legislature itself, to appoint its regents. The number of visitors necessary to constitute a quorum must indubitably be augmented.

We think it but just that the professors of the Richmond school should occupy their respective chairs in the proposed college, and are convinced that this is the general wish of the profession, not in consequence of any real or supposed preëminence of talent or attainment on the part of these teachers, but because their long and slenderly requited

services in some measure entitle them to this distinction. We are not certain, however, but that it would be better to leave the power of reinstatement to the board of visitors. At all events, that body should name the permanent occupants of any chairs which are now vacant or only temporarily filled.

Furthermore, we believe it would be a popular measure, tending to affiliate the profession with the proposed college, if the board of visitors were allowed to appoint annually three or more physicians unconnected with the school, who should attend the examinations, and vote upon the qualifications of candidates for the doctorate.

We have thus briefly stated the principal alterations which are still necessary in the bill now before the committee on schools and colleges before we can give it our support. In conclusion, the true issue is this; not whether a bill such as is here proposed will suit the views of every body, or favour the personal interests of this or that man, but if a medical college in Richmond under the supreme control of nineteen regents coming from all parts of the state, with a quorum large enough to avoid as far as possible the introduction of local or personal interests, this board holding its office as the gift of the legislature, filling all vacancies which do now, or may hereafter exist, appointing an independent board of examiners to act with the faculty in granting degrees, can be obtained from the general assembly, whether such an institution will not better advance the cause of medical education and the interests of the profession and the public, than any which at present exists, or which it is now in the power of the profession to establish?

The Medical School at Berlin.

It is often asked, which of the twenty-four medical schools of Germany holds the highest rank? The question is important, yet it cannot be answered definitely. Prague and Vienna have long been esteemed the best fields of observation for the student of midwifery; more recently pathology has been cultivated with great success at the latter. Physiology has made rapid strides at Würzburg and Bonn; Giessen is associated with the rapid advancement of chemical science. But when surgery is alone considered, the question is divested of most of its difficulty. Notwithstanding the fame of Chelius, at Heidelberg, and Heyfeylder, at Erlangen, Berlin holds the foremost rank in this department of science.

It has long claimed this supremacy. During Graeffe's life, surgeons and students from all parts of Europe, and even from America, were

attracted by his renown to the Prussian capital; his successor, Dieffenbach, added new lustre to the chair of surgery, until death removed him also from the scene of his usefulness and success.

There is no school in Germany where so many students are collected together. Prague, the oldest, has 1272; Munich, 1957; Bonn, 866; Würzburg, 722. Berlin numbers at present 2200, including about 50 Americans; of the whole number, nearly 500 are medical students. In the department of medicine, there are eleven ordinary and six extraordinary professors, and nineteen *privatim docentes*.

The largest institution for the relief of the sick in Berlin is the Charity, containing 900 beds, but capable of accommodating twice that number of patients under urgent circumstances. The two professors of clinical medicine, Drs. Schoenbein and Wolff, have each a male and female ward in this hospital. The first is still active, though advanced in years. He has been the king's physician for years, and is highly esteemed by the profession. He enunciates very indistinctly, and strangers derive no benefit from his instructions, finding it impossible to understand him. Inenken, the professor of surgery, has four wards in the Charity. He is a tedious operator, and his after-treatment is meddlesome. He has been rather unsuccessful with chloroform. It is said that he has lost seven patients in this way. Last January, a patient, from whom he was removing a portion of the orbit, expired on the table. Inenken attributed the death to the shock of the operation, as he had done on former occasions. The assistants thought that anæsthesia had something to do with it. As an oculist, Inenken deservedly holds a high rank; his diagnosis is almost infallible; he operates with care and dexterity, and his after-treatment is good. He still adheres to the old method for cataract—the low incision; in this respect, we believe, he stands almost alone.

Dr. Simon has charge of the syphilitic patients; his lectures denote considerable research. The males, in the syphilitic wards, are examined twice a week, the females three times. Those who are accustomed to the habits of American hospitals would be somewhat shocked at the manner in which the women are required to mount the steps, and expose their persons from the abdomen downwards.

Apart from the Charity, there are clinics for medicine, surgery and obstetrics attached to the University. They are all supported by the government, and admit patients from all parts of Prussia. There are also polyclinics for each of these branches.

It was in the polyclinic in the Ziegel Strasse that Graeffe and Dieffenbach gave instruction. It is here, also, that, Langenbeck may be seen daily, with a large number of cases for consideration. The hospital is not a large one, but only cases demanding operations are admitted. It is said that there are more operations done here than in any hospital on the continent. Certainly Paris has nothing equal to it. The reputation of Langenbeck attracts patients from all parts of Prussia and the surrounding duchies. As a lecturer, this surgeon is considered superior to Dieffenbach; he is in no respect inferior as an operator. His intimate knowledge of anatomy and physiology is sur-

prizing. He is particularly distinguished for his heroic and successful treatment of ankylosis of the knee and elbow, by gradual extension of the limb under the influence of chloroform. Flexion is made very cautiously and is never attempted at all if the patient exhibits a tendency to scrofula.

In the same building, Romberg holds his clinic. His treatment of nervous diseases is much commended. His work on this subject, has been translated into English.

There are several private establishments for medical instruction, the directors of which receive no emoluments from government, though they are recognized by the University as extra-academical professors, or *privatim docentes*. We will mention only a few. In the orthopædic establishment of Dr. Buehring, almost every species of deformity may be seen, and an infinite variety of apparatus. A few months attendance at this institution will suffice to prove to the most skeptical the great advantages of the judicious employment of mechanical contrivances for the relief of deformity. Buehring has strongly advocated the forcible re-union of the two upper maxillaries in congenital absence of the hard palate. He was the first to practice this operation. Dr. B. is a nephew of the late Dieffenbach.

Dr. Von Graeffe, a son of the illustrious Graeffe already mentioned, has a clinic for diseases of the eye. He enters very fully when an opportunity occurs, into the physiology of the eye, and the laws of optics. His treatment of ulcers of the cornea by a solution of atropine is very successful. It is known that in these cases nitrate of silver often leaves a dark speck, while acetate of lead causes an indelible opaque deposit. Atropine is free from these objections, and ulcers appear to improve under its employment more rapidly than with any other local application. Dr. Graeffe also uses it in conjunctivitis. This surgeon's acquaintance with French and English renders him a favourite, and his clinic is much frequented by persons speaking these languages.

The Bethanien Hospital is not intended for the education of students. It was opened in 1848, under the care of the Protestant Sisters of Charity as nurses. This sisterhood, unlike the similar order in the Catholic Church, pledge themselves to a life of celibacy but for five years; at the end of which, if Providence has thrown in their way some likely fellow, they can doff their grey suit;* if not, they can renew their vow for another five years, or for life. They frequently serve in other hospitals, and in the city, as nurses. The proceeds of their services is paid into the treasury of the Bethanien, and they return to their Mother House.

The Elizabethan Hospital for diseases of women, contains ninety beds. It is also attended by Sisters of Charity. As in most establishments in which Sisters are nurses, everything is very clean, and kept in the best order.

* The Countess of Stolberg, recently married from this institution, had been a nurse for many years.

We may briefly mention some of the most striking features of the medical police of Berlin; the same regulations are enforced throughout the Prussian kingdom. The town is divided into a number of sections, each of which is provided with a medical man, who 'receives a salary for visiting all who demand his services. His prescriptions are sent to the nearest apothecary, who charges the medicine to the town; the poor are thus attended free of expense, while no injustice is done to the medical profession. All tradesmen and mechanics are required to pay a small sum weekly to defray these expenses. This custom originated among themselves, but has now become a law. The birth of every child must be announced to the police, and vaccination is compulsory. Every Prussian serves three years in the army. When enlisted, he is re-vaccinated. There are a few licensed houses of prostitution, which are visited twice a week by a medical officer. If the police suspect any fair one of receiving clandestine nocturnal visits, she is visited and examined. The medical police is connected with, but takes precedence of, the town police. Physicians are required to announce to the police all the cases of infectious or contagious disease which may occur in their practice, scarlatina and measles alone excepted. They must also furnish the names and cause of death of those patients who succumb.

It may not be out of place to add a few words on the curriculum of the study of medicine in Prussia.

Before matriculating, students are compelled to undergo an examination in classics, mathematics, history, French, and German literature. They must write a thesis in Latin and German; the principles of philosophy and logic are also entered into. They are then admitted into the University. Their study must extend over a course of four years. At the end of two years they undergo an examination on elementary subjects, *by persons unconnected with the University*. At the end of four years, they are examined by the faculty. The examination commences with an inaugural thesis. When this is approved of by the dean, he examines the student on medical science generally. The professors then ask questions on their particular departments. This is called *examen rigorosum*. The student must then write and print a Latin thesis, which is publicly impugned and defended against three adversaries. The debate, which is usually not very animated, is conducted in Latin. This over, the title of M. D., is conferred. But in order to be allowed to practice, a *staats examen* is necessary. This is of a practical character, and, at the better universities, is rigorous and thorough.

Infection and Contagion.

[We find in the *Revue Thérapeutique du Midi*, the organ of the once celebrated, and still highly respectable, school of Montpellier, the following judicious remarks upon the difference between infection and contagion, from the pen of Dr. Saurel, editor-in-chief of that excellent periodical.]

“I desire to present to my readers what I consider the true medical doctrines in regard to infection and contagion, by briefly analyzing the opinions advanced by M. Anglada, in his work on contagion, and by M. Jaumes, in his course on pathology and general therapeutics.

By the term *infection*, we designate the morbid action that air, impregnated with certain heterogeneous principles of organic and non-virulent origin, produces on a healthy subject. We cannot give the name infection to the morbid effects of air charged with inorganic principles, such as arsenic, mercury, carbonic acid, etc.; in these cases there may be poisoning, but there is no infection. Nor is this epithet more appropriate to the effects of air charged with heterogeneous virulent principles; under these circumstances contagion and not infection is the result.

The effluvia of marshes, putrid emanations, and miasmata, constitute three categories of causes of infection, which include all others, and which differ as much in their origin as in their degree of intensity.

The *effluviæ* derived from the decomposition of animal and vegetable matters in the water of swamps, are very volatile; they cannot be detected by our instruments or modes of analysis, and they extend to great distances from the localities in which they originate. The diseases which they produce are diverse in their character; their effects are rarely confounded with those of contagion.

Putrid emanations are principally disengaged from decomposing animal substances; they remain, so to speak, concentrated in the places where they are formed; their effects are most rapid and most pernicious, and very often they constitute the vehicle of contagion.

Miasms are of animal origin; they are given off from living bodies, whether healthy or unhealthy, when they are crowded together in a confined atmosphere. Their action is more energetic than that of *effluviæ*; they produce diseases of a typhoid character; they extend to a small distance only, and their effects resemble those of contagion.

Such are the sources of infectious diseases. It will be observed that although each category occasions more particularly a certain class of morbid effects, there nevertheless exists no direct relation of cause and effect: thus, a miasm, for example, may give rise to typhus, or hospital gangrene, or dysentery, or to other equally distinct diseases; whereas contagion, as we shall see presently, can only occasion a disease similar to the one in which it originates.

What now is contagion? “It is, says M. Anglada, the transmission of a morbid affection from a sick person to one or many individuals,

by the medium of a material principle, which, being the product of a specific morbid elaboration, induces, in those it attacks, either mediately or immediately, a disease similar to that from which it proceeds, provided predisposition exists."

Contagion cannot be admitted without admitting *virus* also; the *virus* is, in fact, the material principle which transmits the disease. Every contagious disease, therefore, produces a *virus*. But if, in variola, syphilis, hydrophobia, the glanders, etc., this is admitted without debate, it is quite different with other species of *virus* less easily demonstrated. Thus the *viruses* of plague, of yellow fever, of typhoid fever, of whooping cough, are by no means universally admitted. In these cases the material principle being intangible, and invisible, is denied by men who perceive only infection in what in reality is contagion. If every *virus* had been concrete, solid, or liquid, the quarrel between the contagionists and the infectionists would have ended long ago. It is solely because many kinds of *virus* exist in a gaseous or *aëriform* state, that the contagiousness of certain diseases is still a debateable point. But can the form, or physical condition, of a *virus* change in any way its mode of action? Water in the state of vapour, however diffused it may be, is it not always water? The *virus* of small-pox does not cease to be a *virus*, when instead of being solid, as in crusts, liquid, as in the matter of pustules, it encompasses the patient with a virulent atmosphere. Whether you respire the morbiferous atmosphere in the patient's chamber, or whether you touch the *virus* with the finger, is there not contact always, is there not contagion?

Thus, in principle, the distinction between infection and contagion is easy: contagion occurs whenever, a *virus* having been elaborated, there is transmission by mediate or immediate contact, of a morbid affection from a diseased to an healthy person; in all other cases there is no contagion; there may be infection.

A most important question here arises. Can we establish a class of contagious diseases? Is contagiousness a characteristic which may distinguish certain diseases? We do not hesitate to reply in the negative. It is perfectly true that certain diseases are usually transmitted by contagion, as, for example, syphilis, measles, scarlatina, etc., but there is nothing to prove that these affections may not be spontaneously developed. The diseases which are most contagious must have had a commencement—an origin. The diseases which are most generally contagious are not necessarily so; it is not only requisite that there should be sufficient morbid capacity in a healthy subject in order that he may contract a disease, it is also necessary that the *virus* elaborated by the sick man should have sufficient activity. If, from any cause, this activity diminishes, contagion will either become rarer, or it will not take place at all, in this way is explained the cessation of contagious diseases. Certain circumstances, on the other hand, such as epidemic influence and infection, more particularly, may lend increased energy to the *virus*, greater activity to the contagious principle.

We have said that a class of contagious diseases cannot be set apart. Does this mean that all diseases may become contagious? Such a prop-

omission is evidently an exaggeration. There are certain diseases which can never assume this character; nervous diseases are of this number. Although convulsions often occur successively in a great number of persons, there is no contagion in such cases; there are instances of *morbid transmissions by imitation*, to which M. Anglada has devoted an interesting article in his work. Some acute diseases, as pneumonia, hepatitis, and encephalitis, appear insusceptible of assuming a contagious character; but we should be reserved on this point, for other affections, quite as acute and inflammatory have appeared at times to be transmitted by contagion.

Daily observation teaches that contagiousness is especially developed in those diseases accompanied by an alteration of the fluids; the co-existence of a febrile condition and of abundant excretions seems to favour the development of a virulent principle.

In practice, it is not always easy to distinguish contagion from infection; indeed the two influences are often mingled. The following facts may throw some light on this question. It cannot be denied that certain diseases usually arise from infection, while others are generally produced by contagion. If a great number of individuals are simultaneously or successively attacked by the same disease, in order to discover whether the disease is propagated by contagion or infection, it is sufficient to recall its usual origin. If it is a disease of infectious origin, although it has accidentally assumed a contagious character, the indication is not at all modified by this circumstance; it is requisite to destroy the infectious cause, if this is possible,—to purify or evacuate the focus of infection and to disperse the sick, taking precautions against contagion at the same time. If, on the contrary, the disease is usually contagious, the indication is totally different: the isolation of the patients is the first condition to be fulfilled.

In these cases the duty of the practitioner is plain. But suppose several healthy individuals enter an hospital in which some infectious disease is prevailing; a short time afterwards, some are attacked by dysentery, others by typhoid fever, others by typhus. Among the persons who have contracted typhus, is one, living in a salubrious and well-ventilated locality, far from the centre of infection, whose attendants one after the other contract the same disease. Does the transmission still occur by infection? Certainly not; in this case there is contagion. We are well aware that our explanation of infection in the one case and contagion in the other, may be criticised; but practically, this is of no consequence. Whenever contagion is suspected, we should act as if it existed, and advise precautions. Thus, in practice, infection is distinguished from contagion by producing many distinct diseases, while contagion can only give rise to one disease similar to the one from which it arose.

We wish to say a word before concluding upon another question, namely, the relation of contagion to disease. Many physicians consider contagion a *morbid element*. They term whatever throws light either on the diagnosis or treatment of a malady the *elements* of that malady. Contagion, say the partizans of this opinion, fulfils these

two conditions. Contagion might elucidate the diagnosis of a disease if it was constant, and could be produced at will and without danger; but this is not so, and it is well known that the inoculations of which M. Ricord and his followers have made such great abuse, have thrown but little light upon the diagnosis of syphilis, the most contagious of all diseases. For a still stronger reason, contagion will not elucidate those diseases in which it is not an invariable quality.

As to the treatment, when we recognize the contagious nature of a disease, we prescribe what is necessary to prevent its propagation, but this is not therapeutics, but prophylaxis or hygiene. The patient gains nothing by these precautions. What is it to him whether his disease be contagious or no? Does the idea of contagion suggest to us a single remedy, a single method of treatment? Contagion therefore, elucidating neither the diagnosis nor treatment, is not a morbid element. It is a quality—a property of a disease, which it may assume or lose without its other characters being in any way modified.

Therefore to sum up, let us say with M. Anglada, “that in the majority of diseases, contagion is not a condition *sine quâ non* of their nature; that far from being indissolubly associated with them, it is only added as a sort of complication, and that the actions of the economy preserve in these as in all other cases, their independence.”

Deaths from Chloroform.

Chloroform takes away pain, but it also takes away life.—FLOURENS.

We regret to have to record several additional cases of death from chloroform, the histories of which furnish no knowledge to the practical surgeon calculated to authorize the hope that in future the like tragedies will be of less frequent occurrence.

CASE I.—A patient was brought into the Edinburgh Royal Infirmary on the 12th of October last, to be operated upon by deep perineal section, by Dr. Dunsmore.

While chloroform was being administered previous to the operation, the patient suddenly expired. The ordinary methods of resuscitation were employed without effect. At the autopsy the principal organs were found to be in a perfectly healthy condition.

The amount of chloroform employed in this case was *about an ounce*, poured upon a handkerchief. Dr. Simpson, it is well known, advocates this simple mode of administration; but it is not so well known, but no less true, that he has repeatedly insisted upon the careless manner in which it is followed at the Edinburgh Infirmary. In this distressing case, there seems to be grave reason to suspect that sufficient precautions were not taken to ensure a proper dilution of the chloroform vapour with atmospheric air.

CASE II.—Ann Smith, aged 22, a stout young woman, of dissolute habits, was brought into the operating theatre of St. Bartholomew's hospital, on the 20th of October, to undergo the application of the actual cautery to a rodent ulcer of the vagina. She had been in the hospital several months, under Mr. Paget's care, and, a fortnight previously, had been fully anæsthetized without the occurrence of any untoward symptom. She had been ordered to omit her dinner on the day of the operation, but, unknown to the nurses, took a quantity of food, as was revealed at the autopsy.

The form of inhaler usually employed at this hospital, consisting of a metallic cup, supplied with valves and a sponge, was used by Dr. Black. Two drachms and a half of chloroform had been poured on the sponge, and the inhalation had occupied about five minutes, when the apparatus was removed and the patient was drawn into position, and Mr. Paget was about to commence the operation. At this moment, Dr. Black, who had kept his finger on the pulse, noticed that it was weak and fluttering. Almost immediately afterwards, the patient's countenance was observed to have become dusky, and the respiratory movements began to be performed by catching efforts at long intervals. "No time was lost; cold water was at once dashed on the thighs, face and breast, and the failure in the respiration becoming shortly complete, Mr. Paget immediately began artificial insufflation of the lungs. Just before commencing this process, Mr. Paget had ascertained, by drawing the tongue forwards and examining the glottis with the finger, that the epiglottis was not pressed down. Artificial respiration through the natural passages having been very efficiently kept up for about ten minutes, the nose appeared to have got clogged; and Mr. Paget accordingly performed tracheotomy, in order to permit of the more free introduction of air into the lungs. A brandy enema was administered, and, within ten minutes of the seizure, galvanism was also put in use, but without any good result; and, after about three quarters of an hour had been spent in persevering efforts to produce reanimation, they were laid aside as hopeless. It was noticed that, immediately after the first alarming symptoms, the pupils were of medium size, neither contracted nor dilated. All efforts at respiration ceased about two minutes after the first indications of failure; the pulse, however, as a very feeble flutter, was felt occasionally for at least two minutes later.

"*Autopsy, performed by Mr. Paget, twenty-two hours after death.*—The countenance was still bloated and suffused; the *post mortem* rigidity was moderate in degree, or rather less than usual; there was much congestion and lividity of the skin of the depending parts of the body. The thorax was first examined, and nothing whatever abnormal could be detected in any of its viscera. Excepting that the exterior of the right kidney was puckered in places, as if from disease in early life, nothing worthy of note was observed in the abdominal viscera. The brain, its sinuses, ventricles, etc., were all carefully examined, and neither in texture nor quantity of blood was anything abnormal detected. The spine was not examined. In every part inspected—the heart, great vessels, lungs, vessels within the abdo-

men, those of the scalp, pia mater and brain—the blood was universally fluid, and without the slightest trace of coagulum, or even of inspissation. Collected in the quantity of an ounce or two, and allowed to stand in an open vessel, it did not coagulate, nor, in any material degree, change its dark purple colour. Looking then at these facts, and comparing them with the symptoms manifest during life, we seem compelled to seek in a humoral pathology the cause of the patient's death.—There was no visceral disease, functional or otherwise. In all probability, the blood, poisoned past recovery by the vapour it had received, had died; and ceasing then to afford to any of the organs their natural stimulus, the whole of the vital functions had ceased almost coincidentally."

Case III.—Kully R. —, aged 40, of tolerably good general health, of drunken habits, was admitted into University College Hospital, at 11 P. M., on the 6th of October, with strangulated femoral hernia of the left side of two days and a half standing. Efforts at taxis having failed, Mr. Quain was sent for, and arrived at 2 o'clock of the morning of October 6th. He at once decided to operate.

"Mr. Hillier at once commenced giving chloroform in ward 5, and used a long piece of lint of about the extent of the hand, and folded twice. One drachm of chloroform was then poured on the lint, and applied about one inch from the nose and mouth, the apparatus being gradually approximated, and the face covered with a towel. She inhaled the chloroform as patients generally do, said scarcely anything, and was not excited. The pulse remained very good for two or three minutes, when forty drops of chloroform were poured on the lint and applied as before. Within a minute of this renewal of chloroform, the patient began to struggle both with her arms and legs, which she moved about very actively. During the struggle, Mr. Hillier held her rigid hand, keeping it steady, and trying to feel her pulse. This was, however, difficult, owing to the struggles. The lower jaw was very strong, but, after lasting perhaps a little more than half a minute, they ceased, and immediately afterwards breathing commenced. The scream was very loud and rough, not at all of the ordinary kind. Mr. Hillier at once removed the lint and towel from the patient's face, and observed that the pulse had stopped. The arms were relaxed, and respiration then two or three long ones, and ceased to breathe.

Immediately the pulse was felt to be wanting, and water was poured on the face, as soon as the breathing stopped, respiration was again induced within one or two minutes, and she now distinctly uttered a few deep breaths after the primary respiration had ceased to be distinct. The pulse was felt afterwards, but artificial respiration was wanted through a couple of minutes, and the patient was then put to rest. One of the physicians stated that the patient's face was somewhat more relaxed. It was slightly livid, the lips a violet increasing nearly black. The pupils were dilated, and as they were not very distinct, Mr. Hillier left for a moment.

The quantity put upon the lint was just one drachm and forty minims, and chloroform had been given in the same manner, and from the same bottle, to six patients, on the very day which preceded the patient's death.

Autopsy ; conducted by Dr. Garrod, 13 hours post mortem.—Rigor mortis well marked in all the limbs. The blood everywhere very fluid.

The heart was quite collapsed and empty ; its anterior aspect was covered with fat ; its weight is $7\frac{1}{4}$ oz. ; valves healthy. Microscopic examination showed the usual appearances of fatty degeneration in the greater portion of the muscular tissue of the right ventricle ; the walls of the left ventricle were pale and friable.

Lungs healthy. Brain not congested. The arachnoid exhibited traces of chronic thickening.

The intestines were inflamed in the vicinity of the strangulated portion. The other abdominal viscera were healthy.

CASE IV.—This case is without date. It is published in the December number of the *Buffalo Medical Journal*, by T. K. DeWolf, M. D., of Chester, Mass. It relates to a woman of 25 years, in robust health, in labour with her second child.

This lady was visited 30 hours before her death by Dr. Freeland, who found her in the first stage of parturition, and importunate for chloroform. It was unadvisable, in Dr. Freeland's opinion, to produce anæsthesia at that time ; after waiting a few hours, he bled the patient to $\frac{3}{4}$ xx, and administered forty drops of laudanum. After this she had some rest.

When she awoke, she complained of pain in the loins and abdomen, and again asked for chloroform. The pulse was full and strong, under 100 ; tongue moist and clean ; the os uteri was yielding, the contractions were rather feeble ; the pelvis was ample, and there were no unpleasant symptoms. The accoucheur directed decoction of ergot.

The patient "now insisted on having chloroform, and sent for Dr. Smith." This gentleman arrived, bringing two ounces of chloroform. The patient seized the bottle, and continued to inhale it for twelve hours, notwithstanding the remonstrances of Drs. Smith and Freeland.

Dr. De Wolf was summoned, and reached the house in time to find the patient in a dying condition. "Absence of all pain, a cold sweat, cold extremities, oppressed and whizzing (?) respiration, receding pulse, and "vacant glare," pointed to a sudden and fatal termination. Dr. De Wolf could see nothing to bring about this condition, except chloroform. The time and amount of her suffering would not have done it ; there had been no rash meddling ; there was no rupture of the uterus or vagina ; there was no evidence of cerebral congestion ; the patient was perfectly conscious, but insensible to pain. Finally, "her death, as it seemed to me (Dr. De Wolf), could be chargeable to nothing but the abolition of vital force, from frequent repetition of partial

anæsthesia." A dead child was delivered, and ten minutes afterwards the mother died.

This description is not very satisfactory, and the value of the case is still farther diminished by the neglect of a post-mortem examination.

Yellow Fever in Alabama.

A Virginian physician, now residing near Selma, Ala., writes to the senior editor as follows :

"In this State no one can practice medicine, or, what is more important, collect their bills, unless they have a license from the Medical Society of this place. I have attended three interesting meetings of this association, on which occasions the yellow fever was the subject of discussion. The great majority of the doctors think that in the stage of excitement, which lasted from twelve to sixty hours, general blood-letting did good, where it was possible to employ it ; but in most cases, even during the period of excitement, the tendency to depression and fatal collapse was so great that it could not be practised. After this, mercury was considered the "shee, anchor of hope." Not a single case in which ptyalism was induced terminating fatally ; in the fatal cases this effect could not be produced. The adjuvants employed were the warm bath, mustard, diaphoretics, and quinine, although the latter remedy did not seem to have much good effect, except early in the malady, and in mild cases. The physicians look upon the disease as having originated here, and contend that it is non-contagious. Although many fled from the city with the disease fastened upon them, and died in the country, still not a single case of fever occurred among the persons closely in attendance upon them. I do not know the number who died in this place, but believe it about fifty or sixty ; about one in four or five of those attacked died. This large number of cases occurred in a very small population, for more than two thirds of the inhabitants fled. I went out to the burial place to day ; and it was too evident that the destroyer had been at work ; wherever the eye turned, it rested on a cluster of new made graves ; some houses are completely desolated, and "there is no home where there was not one dead."

BIBLIOGRAPHICAL RECORD.

1. *Traité thérapeutique du quinquina et de ses préparations*; par P. BRIQUET, médecin de l'hôpital de la Charité, etc. Paris. 1853; in 8° de viij—558 pages. Chez Masson.

A Therapeutical Treatise on Cinchona and its Preparations. By P. BRIQUET, Physician to the hospital La Charité, etc., etc.

Therapeutical monographs have become so rare now-a-days, that we eagerly seize the occasion of commenting on laboured researches upon any remedial substance, even when their importance is not enhanced by the nature of the medicine or the name of the author. The present work has every title to attention. M. Briquet is justly regarded as one of the most scrupulous and attentive of French observers; he has been largely engaged in practice for thirty years, and has attained professional distinction and scientific position; although he has never before published anything, his opinions on the subjects he has specially studied have long been regarded as authoritative; he now comes before us in a treatise on a remedy for which his own labours have opened new applications. As to the therapeutic value of bark, it is such that it would be absurd to dwell upon it.

Let us, in the first place, present a sketch of the arrangement of this valuable work.

It is divided into four parts: The first two contain experimental and clinical researches on the physiological action of quinia; the third is devoted to therapeutics proper; the fourth to pharmacology; the whole is preceded by an Introduction, which is not the least interesting division of the volume. It is here, in fact, that the author relates to us those strifes and animated controversies, to which the surest of our remedies was subjected before its right of admission into the *materia medica* was fully recognized. The history of cinchona resembles the history of everything else that is good in this world. If a discovery or invention is to benefit mankind, that is all that is necessary in order that its establishment shall be impeded by all sorts of obstacles; it must gain acceptance by a struggle; its admission is always a sort of conquest. It would seem as though this were a law here below, applicable to men as well as to things: Cæsars only enter the world by the Cæsarian operation.

“In 1636, an Indian of the province of Loxa, made known the virtues of cinchona bark to the corregidor of that province, who suffered from intermittent fever. In 1638, the corregidor, learning that the countess of Cinchon suffered from tertian ague, wrote to the count of Cinchon, vice-roy of Peru, and sent him a package of bark, with an

account of its admirable virtues. The corregidor was summoned to Lima, and there cured the countess, and also a great number of fever patients in the hospital. The countess of Cinchon, out of gratitude for this benefit, caused the remedy to be distributed gratuitously, and, in 1646, confided a certain quantity of it to a number of Jesuit fathers, who were about to leave Lima for Europe, in order that they should disseminate it.”*

Upon its introduction into Europe, the Peruvian bark cured intermittents speedily, to the great admiration of the Italian and Spanish physicians, but the English were unwilling to believe, as M. Briquet says, that a powder, imported and propagated by the Jesuits, could be anything else than a diabolical substance, designed to destroy the sick under the pretext of curing them. Morton explained the malediction of the English physicians of the powder of the reverend fathers, by saying that it cured patients *too rapidly*.

The humoralists demanded: If cinchona has no action upon the humours, as the School has declared, how can it cure fever? An explanation was necessary, so they gave one. Cinchona, they said, being a hot and dry substance, dissipates the most subtle part of the humours, and petrifies the rest; so that the blood and other humours are indurated and baked; hence the consecutive effects of the ingestion of cinchona lead to cachexy, phthisis, hydropsy; finally, patients cured of fever by this fatal substance, who do not die in a year, cannot help dying in seven years! Chifflet and Pempius, the great representatives of the galenical doctrines, prophesied, in consequence, the rejection of bark and its condemnation by the succeeding generation.

Were we to judge by the title of a dissertation by Baldus: *Cortex Peruvianus Redivivus, profligator febrium*, dedicated to the Sacred Trinity, cinchona would seem to have regained favour in spite of Chifflet; but this resurrection was not of long duration. A few years afterwards, Guy Patin, the author of the “Martyrology of Antimony,” wrote to his friend Falconnet; “the bark does not cure intermittents, and we have abandoned it: *Jacet ignotus sine nomine pulvis!*”

Thirty years after this condemnation, which reminds one of the imprecation engraved on the pedestal of the statue of Brown: *Opium me hercule non sedat!* Morton reconciled one by one these contradictory arguments, and from that period (the close of the seventeenth century) cinchona has been regarded, says M. Briquet, as one of the most heroic articles of the materia medica, and as the most efficacious remedy against intermittent fever.

Once fairly admitted into the materia medica, quinia made rapid progress. Early in the eighteenth century, it was regarded as efficacious in continued diseases, not only when they presented some traces of periodicity, but even when characterized only by exaltation of the functions of innervation and circulation. But, when the remedy was no

* This account is taken from the work of Ruiz (*Quinologia o tratado del arbol de la quina*, por DON HIPOLITO RUIZ. Madrid, 1792), as cited by MM. Delondre and Bouchardat, in their letters on cinchona.—O.

longer a matter of dispute, they disputed about the dose. Torti first noticed that in continued diseases the dose should be augmented. M. Briquet does not exaggerate, perhaps, when he asserts that the use of quinine in large doses, is equivalent almost to a second discovery of cinchona. It is, in fact, a new application of the remedy, extending to diseases quite unconnected with intermittent fever. Torti's new treatment encountered a violent adversary in the celebrated Ramazzini, in other respects a devoted partizan of cinchona; he was a rival of Torti, which explains, perhaps, why he wrote of the new method: *Illam existimo periculosam, omnino empiricam et aptam ad miserum ægrum conficiendum*.

After describing briefly the obstacles which retarded the introduction of bark into medicine, M. Briquet rapidly notices the modern controversies excited by its various applications. "It is a singular fact, he remarks, that we, who are neither humouralists nor solidists, neither slaves to tradition nor opponents of innovation; we who are calm physiologists, independent of all petty considerations of sect and system, have acted in this matter precisely as our ancestors did, and have even repeated their arguments. There have not been wanting, to complete the parallel, morose skeptics, who have perorated like Chifflet and Plempius, and urged the utter abandonment of quinine in large doses. But cinchona will survive all ancient and modern polemics. With full confidence of this fact, let us examine into the physiological action of this substance, usually regarded as the type of tonic medicines."

By means of these researches which constitute one of the principal merits of his work, our author believes that he has arrived at a knowledge; 1, of the medicinal mode of action of cinchona; 2, of the cases in which it is appropriate; 3, of the circumstances which are favourable or unfavourable to its employment; 4, of the method by which its best effects may be obtained, and its inconveniences avoided; 5, of the exact value of each of its preparations; 6, of its degree of activity according to the organic surface on which it is applied.

The author examines the action of cinchona upon the different systems separately, with a view of determining what place in the materia medica it ought to occupy, if classified in accordance with its physiological effects upon the organism. His principal conclusions may be condensed as follows:

Circulation. 1. The sulphate of quinine in large doses depresses the circulation; 2. This influence often lasts for several days after the employment of this salt; 3. It is in direct ratio with the quantity of the salt administered at a time, one scruple being apparently the limit, below which there is no sensible effect; 4. It is not absolute, since the invasion of a phlegmasia may annihilate it; 5. It is immediate, direct, and not secondary to other influences.

In other words, the quinine exerts an essentially depressive action upon the circulation, and this depression does not depend upon its effects on the brain, but upon its direct action on the contractile power of the heart; this depression measured by the hæmodynamometer sometimes indicates only half of the usual force or tension.

Pulse. Quinine injected into the veins diminishes the normal pressure of the blood one-eighth, or even one-fourth; the pulsations are uniformly reduced in number, sometimes as much as 25 beats in the minute.

Blood. 1. The proportion of fibrin is augmented after the administration of a considerable quantity of quinine; 2. The quantity of globules diminishes; the quantity of water increases, but these two effects may depend upon other causes; 3. The quantity of salts is not affected appreciably.

Encephalon. The principal phenomena are headache and uneasiness of short duration, disorders of hearing, deafness, ringing in the ears, etc., which the author considers proportional to the doses administered; vertigo also occurs, and calm or violent delirium. M. Briquet denies the possibility of meningitis, attributed by some physicians to the use of quinine. He admits the momentary excitant action of quinine upon the brain, but considers as its true effects those which are consecutive and durable, which are manifestly sedative.

Respiration. Quinine, when administered in a poisonous dose, does not cause active pulmonary congestion; but in certain cases, in consequence of the species of asphyxia in which the animal perishes, the blood, having lost its consistence, stagnates in the lungs and engorges them. Dyspnoea and præcordial anxiety should be noted as accessory symptoms.

Digestive Organs. In the apyretic condition quinine is uniformly tolerated; in the febrile state tolerance is less absolute; slight excitation supervenes, but never with serious consequences; it is only when the digestive canal is the seat of a true phlogosis, that the medicine may exert an injurious action.

Spleen. M. Briquet, without expatiating unnecessarily on this point, denies the sudden diminutions in volume of the spleen.

In his series of experiments, our author, criticising contrary opinions as he proceeds, thus establishes that the action of quinine is everywhere debilitating, *hyposthénisant*. You, who have observed the excitant effects of quinine, are not wrong, he says; but you have only seen the action of the medicine in small doses and at the commencement. I, who have studied its ulterior action with large doses, have seen its sedative effects. In fact, there is this difference between quinine in large and small doses,—at first and afterwards.

Thus we arrive at the second part of M. Briquet's work, entitled: *Absorption and Elimination of the Salts of Cinchona*.

Every one knows that the sulphate of quinia enters the blood, remains there for a time and is eliminated after undergoing decomposition, as is strikingly manifested by the re-action of the iodide of potassium on the urine.

The necessity of this information to the practitioner is easily conceived; to know the time which quinine requires in order to be absorbed and to act on the economy,—the time it may remain in the organs,—the quantity absorbed and the relative effect according to the dose administered; it is only necessary to enunciate these propositions

in order that the importance of their positive solution should be appreciated. M. Briquet has undertaken this task, and has accomplished it. He has studied the circumstances which may modify the action of the salts of cinchona; age, sex, strength, etc., and has carefully noted the influence of each upon the physiological action of cinchona on the organism. This portion of the work is only preparatory, but it is indispensable to the practitioner who would know what he is doing. The third part is consecrated to an examination of the mode of action of cinchona.

How does this substance act upon the healthy or diseased organism? This is the capital point.

Cinchona has two kinds of action: when absorbed, it is sedative; placed in direct contact with a tissue, it is eminently irritant. M. Briquet undertakes to explain this paradox. In absorption, he says, contact is effected gradually, molecule by molecule; in material contact, masses are placed in reciprocal action, and the effect is violent. Or, here is another explanation: The encephalon, which presides over internal absorption, has not the same sensibility as the peripheric nerves of the surfaces on which immediate contact takes place.

All things considered, then, cinchona and its salts, in large doses, according to M. Briquet, are *agents exerting a hyposthenic action upon the nervous system of organic life*. They destroy nervous power wherever it exists, acting primarily and fundamentally upon the nerves presiding over respiration and circulation, upon the ganglionic nerves of the splanchnic cavities, and only secondarily upon the portion of the encephalon connected with the life of relation; differing in this latter particular from the other narcotics.

Having laid down the general action of quinine, the author is sensible that he has achieved but half his task. How does cinchona act in particular states of the organism? How does it cure intermittents, remittents, pernicious fevers? How, lastly, does it act in continued fevers, rheumatisms, phlegmasiæ? These are the practical questions.

From his definition of the action of cinchona, the author's theory of its therapeutical indications may be foreseen. Of all the articles of the materia medica, there is none on which explanations have been lavished more prodigally. There are many reasons for this preference; one especially, is that chief property of cinchona, its anti-periodicity; a general modifier of the economy and a specific at the same time, it combines all the difficulties which can beset a medical problem. In order that a system should be demonstrated with any completeness, it must give a good explanation of the mode of action of cinchona, or its adversaries will borrow dangerous arguments from this source. The Italian school concentrated its most seductive hypotheses upon cinchona; the school of Broussais, to which this substance was a great annoyance, had to defend itself against many attacks grounded on this specific.

M. Briquet hopes, he says, to elucidate this obscure point, and to substitute a plain theory of intermittency for the blind gropings of empiricism:

"No, says M. Briquet, cinchona does not cure intermittents by acting as a toxic antidote, by absorbing or drying, in the intestines, the humoral ferment developed by paludian miasmata, as the ancients would have it.

"No, it does not cure by substituting one enteric irritation for another, as Broussais declared; no, it does not cure by reducing the distended spleen, as M. Piorry says; no, it does not cure by combatting the paludian cachexy, according to M. Boudin's doctrine.

"Humouralists and solidists, you have deserved well of science by exhausting every path of error, and leaving us only the true path to explore: you have only forgotten to examine the dynamical condition, to study, I say, that faculty which our organization possesses of being disordered in its acts without the senses perceiving it, or any material lesion being appreciable to our inspection. *There*, you would have found the cause of periodicity, and thence you would have deduced the special action of cinchona which cures it.

"This examination of the dynamic nervous system would have taught that the nervous system, which presides over a paroxysm of intermittent fever, plays a double part: 1. It places the portions of the body affected by the morbid cause in communication with the nervous centres, and thus awakens, for vital reaction, all the resources of the economy. 2. It influences the different functions which take part in that paroxysm, circulation, calorification, the secretions, and, in a word, whatever is necessary to resist or eliminate the morbid cause.

The author's theory of periodicity, and the explanations he deduces from it as to the curative agency of the salts of quinine, are developed at too great length for us to enter into their details. They are summed up, moreover, in the following proposition: "To sum up this discussion, I would say then, that the alkalies of cinchona cut short the paroxysms of intermittent affections, whatever their cause or nature, by their hyposthenic action upon the portion of the central nervous system which is called into play during the paroxysm, and by rendering them incapable of combining and co-ordinating the united actions necessary to the synergic effort, otherwise called physiological action, which constitutes an intermittent paroxysm. It also cuts them short, by stupefying, by an elective property, the nerves which preside over the circulation and calorification."

The action of cinchona on intermittents is specific, then; it acts directly on the nerves of organic life. It does not act specifically on this system by derivation, says M. Briquet, nor by tonic or astringent stimulation, as has been asserted; take away the colouring matter and tannin from cinchona; leave us, in fact only quinine, and there is neither tonic nor astringent left. We must therefore seek some other mode of action. There is no other except the stupefacient mode; and M. Briquet adds, that every anti-periodic owes its virtues to this therapeutical mode of action. The disease has its remedy, then; periodic fever is met by quinine; not that the morbid cause is reached in reality, but because the paroxysm and periodicity is cut short.

The conclusions, as the reader observes, do not respond quite mathe-

matically to the premises. The sedative action of quinine on the circulation, which, in the physiological researches was the grand point, becomes an accessory. It was necessary at all hazards to build up a theory of periodicity, and to give a type of the mode of action of cinchona. Is this that severity of induction for which the skilful physician of *La Charité* is noted? Has not M. Briquet, with all his scientific honesty, yielded to a logical artifice which others have designedly employed. Between the physiological part and the therapeutical there is a void, which is but imperfectly filled by a double theory.

All the attempts which have been made to raise medicine to the standard of the natural sciences have failed when they came to do with therapeutics; or, if medicines were restricted to the artificial limits assigned them, this has always been to the detriment of rational treatment. The therapist deals with other elements than the observer; instead of looking on, he acts; instead of noting pathological phenomena, he combats injurious actions; he disturbs the natural order, and introduces new factors into the disease, already so complex. There results a mixture of actions and influences, some spontaneous, others excited, which have no connection with the regular phenomena, the evolution of which the observer watches passively. The science of therapeutics is thus in a position unknown in the exact sciences, but common enough in the technological sciences.

But, as it is usual to class in an inferior rank every study conducted according to the method which the nature of its mission imposes on therapeutics, some physicians, believing that this state of things was due to incomplete observation, and insufficient experiments, have sought most perserveringly and by the most skilfully conceived methods, to erect a rational in place of an empirical system of therapeutics. The plan which has the greatest number of partizans, consists in giving a medicine to healthy individuals, and then studying its effects upon the normal functions, pushing the dose to intoxication, if necessary. These incontestable data obtained, the rigorous results of experiment are applied to the sick, and as the physiological action is mathematically known, it is concluded that the therapeutical influences will be equally precise. Here, however, is a logical error, which, though it is tolerated sometimes, is none the less glaring. In therapeutics, more than in any other science, perhaps, we should distrust those men of the laboratory, who base their conclusions on physiological properties as well as those who rely on chemical qualities. The most esteemed experimenters of our day, who might have encouraged therapeutical deductions based upon the experiments of physiology, have carefully avoided doing so, thus giving physiological therapeutics the harshest rebuff it could receive. No one has rendered more signal service to science, in this respect, than Claude Bernard, who has proved that not only sickness, but fatigue, exhaustion, or fever, may interfere with the results of experiment. Notwithstanding, the medical mind takes this direction at present; only, some individuals regard physiological action as the exclusive foundation upon which everything reposes,

others consider it a useful piece of information, which may be consulted with advantage until we have something better. Our conviction places us in the first category; M. Briquet inclines to the first.

"The work which I offer to physicians, he writes in his preface, is a treatise in which all that relates to the preparations of cinchona has been subjected to experiment, analyzed, regulated in as precise a manner as the most accredited physical theory, or the best understood surgical operation; a treatise in which I have endeavoured to make cinchona, and especially its alkaloids, an instrument whose effects and mechanism can be determined in an almost mathematical manner.

"After having determined, with all the care of which I am capable, all the effects of cinchona and its preparations upon the different organs and systems of the economy; I have established the nature of their action upon the organization. This fairly demonstrated, I have been enabled to make a *rational* application of these agents to diseases in which they have already been employed, to deduce the physiological relations between the action of cinchona and the phenomena of intermittency, and to construct a theory which accounts for the specific effects of this substance. I am confident of having thus substituted a rational progress for the blind gropings of empiricism."

Such is the author's programme. It could not well be more frankly explicit; and the author, while declaring his allegiance to *rational* therapeutics is not one of those who have studied medicines without observing the sick; he is a clinical professor of undeniable competence and experience; he is not a man to arrange facts to suit a theory; his physiological researches are rigorous and full of interest; his therapeutical results are conclusive: it remains to establish the relation between them. It was to show that this relation could not be made out satisfactorily, that we have ventured on this long digression. The author's experiments on animals and on men in health do not lead logically to his therapeutical method, and he is compelled to resort to theory. But the theorist soon gives place to the practitioner; whether his explanations are received or not, his carefully observed clinical facts will remain. The work of M. Briquet abounds with practical remarks, which are indisputably true, and which will accommodate themselves to all theories. The applications of cinchona to periodic attacks, to pyrexies, inflammations, and especially to acute articular rheumatism* are described in a learned manner. The work concludes with an examination into the relative value of the different preparations of cinchona, its doses, mode of administration, etc. In this latter part, the author makes too little allowance, perhaps, for idiosyncracies, and insists too much upon the ability of the practitioner to calculate, as he says, the exact amount of power which he puts in action.

Finally, in giving a critical opinion of this treatise, we would say that the general method, which consists in substituting reason for empiricism, and proving that a medicine will cure, because in virtue of its physiological properties it ought to do so, does not number us

*M. Briquet originated this method of treatment.

among its partizans. It gratifies learned curiosity, but produces few discoveries; it usually presents to us in a chemico-physiological paraphrase what we knew long before from experience. Let any one read the recent observations on ferruginous compounds, and they will learn what novelties this method has acquired for us. On the other hand, the practical observations, the therapeutical indications, and clinical experiments which constitute the larger portion of this treatise, cannot be praised too highly, and merit the most honourable place in contemporaneous medical literature.

Hitherto, the literature of cinchona has been dispersed through a hundred volumes; all that it contains of importance may now be found in the work of M. Briquet, displayed by a master hand. We have wished to excite a desire on the part of our readers to examine for themselves a work, in which so many questions of peculiar interest to Southern medical men are elaborately treated; to possess a didactic authority from which the best read physician may learn something.

II.—*Proceedings of the American Pharmaceutical Association, at the Annual Meeting, held in Boston, August 24th, 25th and 26th, 1853.* Printed for the Association. Philadelphia. 1853. Pamphlet, pp. 48. (From the Association.)

The proceedings of this association, which has been instituted for "the advancement of pharmaceutical knowledge and the elevation of the professional character of apothecaries and druggists throughout the United States," indicate a most praiseworthy zeal in the accomplishment of these important objects.

We cannot commend with too great warmth the judicious measures that have already been adopted by this society, or extol too highly the generous exertions of the two or three truly scientific men to whom its organization and efficiency is mainly due.

The constitution of the Pharmaceutical Association, resembles that of our National Medical Society. It is composed of delegates from local societies, who meet annually in some accessible city. During the year the affairs of the body are directed by an executive committee, which, with the assistance of local secretaries, residing in the cities and chief towns of the Union, collects information on subjects connected with pharmacy, and encourages the formation of local organizations among the apothecaries of the country.

In their efforts at reform the Pharmaceutical Association has properly bestowed its first attention upon the subject of education. A committee has been appointed to prepare an address to the pharmacists of the whole country, urging them to extend facilities to those in their employ for obtaining an adequate knowledge of pharmacy, by furnishing them books and opportunity to use them, and by personal interest and instruction.

Another committee was charged with the duty of inquiring into the nature, extent, and locality of *home adulterations*, and of proposing a remedy for this abuse.

Measures were adopted with a view of remedying the evils incident to the present unrestricted trade in poisons. A committee was appointed to consider the propriety of invoking legislative protection and restriction in regard to the sale of medicines. Arrangements were made to procure a cheap and extensive edition of the Pharmacopœia, and many other useful propositions were either discussed or adopted.

In connection with the report of the "committee on quack medicines," the Association passed the following resolutions:

"Resolved, That the American Pharmaceutical Association, BELIEVE THAT THE USE AND SALE OF SECRET OR QUACK MEDICINES IS WRONG IN PRINCIPLE AND IS IN PRACTICE ATTENDED WITH INJURIOUS EFFECTS TO BOTH THE PROFESSION AND THE PUBLIC AT LARGE, and believe it to be the duty of every conscientious druggist to discourage their use.

"Resolved, That this Association earnestly recommend to our pharmaceutical brethren to discourage by every honourable means the use of these nostrums; to refrain from recommending them to their customers; not to use any means of bringing them into public notice; not to manufacture or to have manufactured any medicine the composition of which is not made public; and to use every opportunity of exposing the evils attending their use, and the false means which are employed to induce their consumption."

At page 38, we find the following account of the condition of pharmacy in Virginia and North Carolina:

Virginia, with a population of about 1,500,000, has 110 regular drug stores, distributed as follows:

Richmond,	22	Salem,	3	Abingdon,	2
Petersburg,	9	Farmville,	3	Sheppardstown,	2
Alexandria,	8	Danville,	3	Charleston,	1
Norfolk,	9	Winchester,	3	Fincastle,	1
Portsmouth,	3	Harper's Ferry,	3	Elizabeth City County,	1
Charlottesville,	3	Charlestown,	3	Charlotte County,	1
Staunton,	3	Fredericksburg,	3	Marshall County,	1
Lynchburg,	3	Leesburg,	3	Nansemond County,	1
Wheeling,	8	Buchanan,	2	Lewis County,	1
Matinsburg,	3	Harrisonburg,	2		
					Total, 110

Besides these, medicines are kept to a limited extent by general shopkeepers through the villages and rural districts. The druggists of Richmond and the large towns, generally employ the United States Pharmacopœia, so far as the proportion of ingredients is concerned, but great deficiency exists in the use of the officinal weights. Of the 22 druggists in Richmond, only eight are believed to use troy weight in compounding the officinal formula. In Alexandria, only about a half use the proper weights. The druggists in these places, and in the smaller towns more especially, are apt to use the Pharmacopœia through the Dispensatory, and often depend on old editions.

Physicians in Richmond, Norfolk, Portsmouth, and Alexandria, send their prescriptions to the apothecary, but in the rural districts and villages they keep and supply medicines, except in special cases.

The "Richmond Pharmaceutical Society" is the only organization in the State; it includes twenty members, and was established to promote good practice, to encourage the increase of pharmaceutical knowledge, and to advance the interests of the body in Richmond. The Society was not

instituted with educational functions, nor do the members generally approve of its assumption of them, on interested grounds. The spirit of trade is too much in the ascendant to admit of those liberal views and sacrifices on the part of the present generation to benefit the rising one, which are absolutely necessary to uphold and cherish a College of Pharmacy as an educational institution; nor do the members in their individual capacity manifest much disposition to cultivate scientific pursuits.

"Quackery is greatly encouraged in Virginia," yet mostly by the ignorant classes. Secret medicines have become more popular in some districts by the extensive use made of them by "regular graduated physicians," who prescribe various "vermifuges," "pectorals," "expectorants," "alteratives," &c., which is so good an argument with the patient, that he next time tries the *nostrum* without the doctor. There appears to be an increase in the variety rather than the amount of sales of quack medicines, and those for external use are more in demand than others. Country stores generally keep an assortment.

In taking a general view of the Pharmacutists of Virginia, there are many in the chief towns that may be referred to with pride, as examples, and these are increasing. Students annually are returning from the North, bringing with them the habits and knowledge acquired by a regular training. The example of these is influencing those around them to improve, and in places where a few years since preparations that never should be delegated to another, were rarely made, now furnish not only their own demand, but other stores. As a whole, however, there is much need of improvement in practice, and of that professional spirit that leads the proper pharmacist to resist temptations to gain by resorting to practices wholly at variance with professional honesty, however they may be connived at by competitors in trade.

North Carolina. So far as we are informed, there are but seventeen drug stores in North Carolina. Of these, *three* are in *Wilmington*, *three* in *Washington*, and two or three in *Raleigh*. The United States Pharmacopœia is employed, and in the towns mentioned, the officinal weights and measures are used. No organization exists. The large majority of physicians keep and dispense medicines, and quack medicines are abundantly sold. The sparsity of towns, and the large amount of pharmacy in the hands of physicians in the rural districts, precludes the advancement of our art in North Carolina.

III.—*Notes on the State of Virginia.* By THOMAS JEFFERSON. A new edition, prepared by the Author. With notes and plates never before published. 8vo., pp. 275. Richmond: J. W. Randolph. 1853. (From the Publisher.)

This celebrated work, composed by Jefferson in 1781 while confined to a sick room, in answer to the enquiries of the then secretary of the French legation in this country, has passed through many editions; the last we believe was published in 1832. The work having nearly passed out of print, the executor of the illustrious author has placed in the hands of the present publisher certain documents and maps, which enhance the value of the edition now offered to the public.

It would be useless to comment upon the body of the work. It is a noble example of what may be accomplished for science and literature even by those whose lives are engrossed by affairs of State, and

has always been justly regarded as an unanswerable rebuke to the puny detractors of Nature's works in the Western world.

The additions which are now made give greater completeness to the treatise. The handsome manner in which the book is brought out will make it eagerly sought after by those who do not possess it already. We bespeak the public support for the enterprize which our southern booksellers are now manifesting.

IV.—*Experimental Researches on Physiology and Pathology.* By E. BROWN SEQUARD. D. M. P. Laureate of the Institute of France. New York. H. Bailliere. 1853. 8vo., pp. 128. (From the Author.)

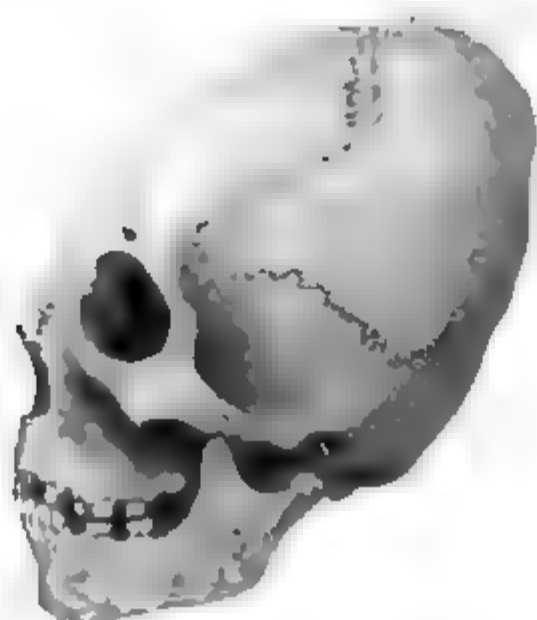
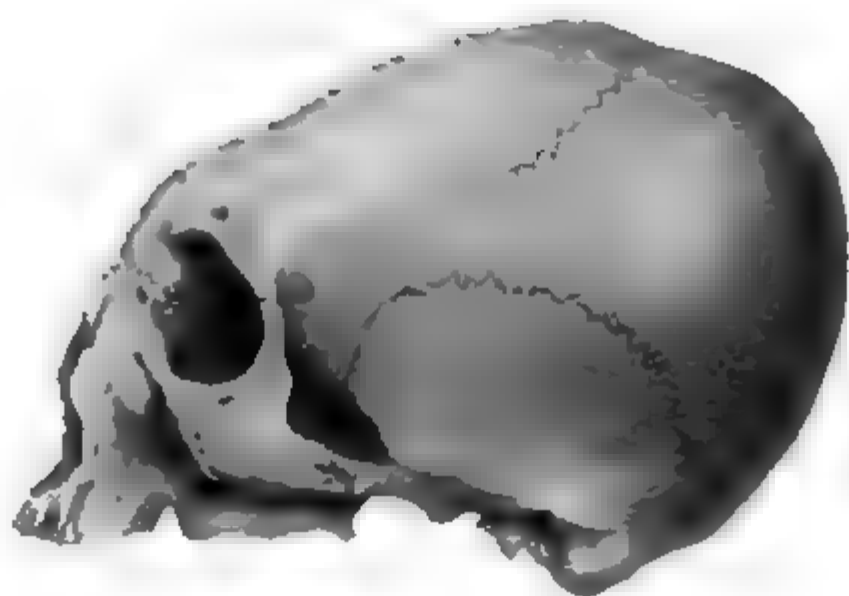
The papers collected in this volume have been published from time to time in the Medical Examiner during the stay of the learned author in this country. They do not comprise all of the original experiments of M. Sèquard; another book, treating chiefly of the pathology of the nervous system and of the treatment of nervous diseases will soon appear.

The memoirs are thirty-three in number, and each paper contains a concise description of one or more experiments. It is obvious that such a work escapes analysis, for to allude briefly to each of the author's views would require a space equal to that contained in his work. We shall therefore only say, in general, that this book presents the results of a careful experimenter whose contributions to physiological science are most valuable. Although his researches are not as brilliant as those of his compeer Bernard, they are more extensive, and we may add that his results are less controverted.

Americans should feel a pride in the just renown of this truly amiable and learned man, for, we believe, that he, like Ricord, is a native of this country, although his career has been passed in Paris. We owe him a debt of gratitude, too, for the impulsion he has given to experimental enquiry in medicine during his sojourn among us. Already, in New York, a course of experimental physiology is deemed necessary to a complete curriculum, and Dr. Dalton and others in that city have established a Biological Society, which bids fair to render great services to medical science in America.

M. Sèquard's views have already been extensively disseminated in the pages of the Examiner; we trust that the modest volume in which they are now embodied will still farther extend a knowledge of them.

We have received *Carpenter on Alcoholic Liquors* and *Buckler on Fibro-Bronchitis*, from Messrs. Blanchard & Lea; the *Transactions of the New York Academy of Medicine*; Mèding's *Paris Médical*, in two volumes; the *American Medical Monthly*, from Mr. Putnam; an *Introductory Lecture*, from the accomplished author, Dr. Bullitt, of Louisville; an Address at the Opening of the *Savannah Medical College*, and several literary works.



THE
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ART. I.—*The Spinal System, in its Application to Practice.* A Lecture delivered before the Medical Society of Virginia, on Dec. 3d, 1853. By MARSHALL HALL, M. D., F. R. S., Foreign Associate of the “Académie de Médecine” of Paris, &c., &c.

I have long thought that our science and art will take the rank which is due to them, when that is accomplished for them which was accomplished for astronomy when it was raised out of astrology, and for chemistry when it was raised out of alchemy. This can only be done by superseding mere empiricism by physiology.

Anatomy, physiology, diagnosis, pathology or the physiology of disease, and therapeutics or the physiology of the action of remedies; such are the links of the chain which binds the science and the art of medicine together.

To the scientific physician, a patient presents an object of research, as much as a physiological experiment. Mere observation only leads to empiricism, using that term in its best acceptation. It is observation combined with physiology which alone lead to the due appreciation of the nature and the rational treatment of disease.

It is an elevated theory, in a scientific point of view, to visit a patient and to pass through the wards of a hospital, guided in our office by an enlightened and profound physiology.

This assertion is particularly true when diseases of the nervous system, so long misunderstood, are the objects of our attention and care. In this class of diseases, the physiology is in fact the diagnosis, the pathology, the therapeutics, and it is itself founded on anatomy.

Until recently, we constantly met in works on medicine with the
VOL. II.—44

term cerebro-spinal. It is now known that this term is a misnomer, and involves an erroneous idea. The cerebral system is *toto cælo*, distinct and different from the spinal, and must not longer therefore be confounded even in our expressions. Henceforth we must speak of the cerebral and spinal systems, as essentially and absolutely distinct from each other in their anatomy, their physiology, and their pathology. To these the ganglionic system must be added to complete our view of the *nervous system*.

The spinal centre is marked by several distinct enlargements. The first of these is termed the medulla oblongata; it is the central organ of the functions of the acts of deglutition and respiration, and especially of the larynx and pharynx. The second gives origin and insertion to the brachial, and the third to the crural plexuses. The last is seated in the lowest part of the spinal marrow, and constitutes the central organ of the functions and acts of the rectum and the bladder, the vesiculæ seminales and the uterine system; it may be designated from its physiological importance, the medulla oblongata inferior.

It is through the medulla oblongata superior and inferior, and their eisodic and exodic nerves, and the muscles supplied by the latter, that the spinal system is the nervous system of all ingestion and egestion or expulsion, and of exclusion and retention. It is through the same nervous centres, the same nerves and the same muscles, that the special pathology of spinal or convulsive diseases has its origin. The same muscular organs are the seat of the functions in health and of the symptoms in diseases.

In epilepsy, for example, we have laryngismus and pharyngismus, and emissions of urine, fæces and semen. The same thing in the epilepsy of strangulation. The larynx and pharynx are also specially effected in tetanus and hydrophobia.

Physiology has in these diseases become pathology.

It is from its forming a special portion of the spinal system that the larynx plays such an important part in the diseases of this system. It is from the importance of laryngismus, in its relation to danger to life, and in epilepsy to mind or limb, that this symptom possesses such engrossing interest to the physician.

In the London Lancet for Nov. 1852, I published a list of cases in which it might become necessary to perform the operation of tracheotomy, which I beg leave to reproduce on the present occasion.

TABLE OF CASES REQUIRING TRACHEOTOMY.

I. *Cases of Paralytic Laryngismus ;*

1. Apoplexy of Inorganic Origin ;
2. Coma after Epilepsy ;
3. Deep Intoxication ;
4. Severe Narcotism ;—each combined with formidable ster-
tor threatening life.

II. *Cases of Spasmodic Laryngismus ;*

1. Epilepsia Laryngea, threatening life or intellect ;
2. Epilepsy with Torticollis, with the danger of suffocation ;
3. Infantile, and
4. Puerperal Convulsion ;
5. Hydrophobia ;
6. Tetanus ;
7. Pertussis threatening Convulsion or Hydrocephalus ;
8. Laryngitis ;
9. Ulceration of the Larynx ;
10. Certain Cases of Cut-throat ;
11. Diseases adjacent to the Larynx, as
 1. Tumour,
 2. Aneurism,
 3. Cynanche Tonsillaris,
 4. Scarlatina, Variola,—with paroxysms of Laryngis-
mus ;
12. Choking, from
 1. A Foreign Body in the Larynx or Trachea ;
 2. A Foreign Body in the Pharynx ;
 3. A Mass of Food in the Pharynx ;
 4. Inhalation of Acrid Vapour ;
 5. The Attempt to Drink Boiling Water ;
 6. Swelling following the Attempt at Suicide by Stran-
gulation, &c., &c.
13. The Poisonous Effects of Strychnia, &c., threatening Suffocation.

III. *Cases of Permanent Laryngismus ;*

1. Œdema of the Glottis ;
2. Laryngitis ;
3. Other Diseases of the Larynx, or
4. Of the adjacent Tissues.

To these cases may perhaps be added—

(IV. *Cases of Asphyxia ;*

1. Drowning ;
2. Hanging ;
3. Suffocation from Mechanical Causes,
4. From Breathing Irrespirable Gases, &c., &c. ;—the ob-
ject being efficient artificial respiration.)

From this table it will be sufficiently apparent that the subject of tracheotomy is one of vast and vital importance, requiring the utmost attention from our best physicians and surgeons, and not likely to be exhausted by the superficial observer and thinker. I commend it to the earnest inquirer.

It will be observed that in none of these cases is the operation a remedy for the disease. In all it is but a means of averting danger to life, and so of obtaining time for the exhibition of proper remedies. Even in laryngitis, tracheotomy is only the means of prolonging life, while mercury or other remedies cure the disease. In Mr. Brunel's case even, the operation did not lead immediately to the extraction of the coin which had been inhaled into the trachea; but it rendered the patient's own experiment of inversion of the position of the body, which had previously been not unattended by danger, safe, and as it happily proved, efficacious. It had opened a safety valve against the dangers of *laryngismus*. And so it is in every case.

In a word, tracheotomy is a special remedial equivalent and antidote to laryngismus and its effects and its danger; neither more nor less.

Epilepsy occurs under a variety of forms. It is in these different forms, the mildest and the direst of human maladies, however serious its *tendency* may be in all.

In one case, it is so evanescent as to come and go almost unnoticed. In another, it may be very serious, although still unattended by coma, or mania, or dementia. In a third, it may involve closure, partial or complete, of the larynx, with the frightful cry or struggle for breath, or an actual interruption to the respiration. Thus laryngismus may be the fulcrum on which violent respiratory efforts act, inducing congestion of the face, neck, cerebrum, medulla oblongata, &c., leading to coma, mania, paralysis of the superior laryngeal and pneumogastric nerves, &c.; the spasmodic laryngismus passing into the paralytic with stertor, with augmented coma.

I have prepared a table, exhibiting in a concise form the phenomena and relations of epilepsy, and I beg you to examine them, and to use them as your guide in studying this disease until you find something better.

I. And pass into *Inorganic Epilepsy*, which may be divided into the—

I. Epilepsia Mitior, and this into	II. Epilepsia Gravior, and this into
<p>I. Epilepsia Evanescent, with</p> <ol style="list-style-type: none"> 1. Obscure Trachelismus; 2. Oblivium, Confusion, Vertigo, &c. 3. Distortion of the Eyes, Features, Fingers, &c.; &c. 4. Nutatio; Falling &c. 5. Faintness; 6. Oneirodynia; 	<p>I. Epilepsia Laryngea; involving the superior Laryngeal, &c., with Trachelismus;</p> <ol style="list-style-type: none"> 1. Purpurescence; 2. Stupor; Coma; <p>II. Spasmodic Laryngismus,</p> <ol style="list-style-type: none"> 1. Dyspnoea, 2. Convulsion, leading to
<p>II. Epilepsia Trachelea, involving the Spinal Ac- cumbent, &c., with</p> <ol style="list-style-type: none"> 1. Aura; Flocci; Tinnitus; Odor Moschi, &c. 2. Manifest Trachelismus—Fixed Head; Tor- ticollis; Obstipitas; 3. Spasmodic Aura; 4. Laryngeal, Stridor, Cry, Dyspnoea; 5. Bitten Tongue, Lip, or Cheek; 6. Foam; Rattles, &c. 	<p>1. Coma,</p> <ol style="list-style-type: none"> 2. Stertor, with III. II. II. 3. Augmented Coma; 4. Mania, 5. Amentia, 6. Spasmo-Paralysis, 7. Death.
<p>1. Flushing;</p> <ol style="list-style-type: none"> 2. Stupor; 3. Falling with Violence; 	<p>II. Epilepsia Syncopale, with</p> <ol style="list-style-type: none"> 1. Pallor, Lividity; 2. Syncope; 3. Sudden Death. <p>Hidden Seizures; Mania; Crime!—undeserved Punishment even to death!</p>

“ Irritation of the Medulla Oblongata, and Congestion of the Cerebrum—

The Treatment should be equally free from Empiricism in both; and consist in—

- I. Avoiding the exciting Causes;
- II. Giving
 1. Antacids;
 2. Gentle Emetics;
 3. Gentle but efficient Aperients;
- III. Attending strictly to Posture;
- IV. Subduing Excitement by Hyoscyamus;
- V. Subduing induced Susceptibility by Strychnia;
- VI. Removing organic Effects by Mercurials;
- VII. Restoring the general Health, by Air and Exercise, &c.; and be founded on an adequate Diagnosis.
- VIII. Are there any Specifics?

Augmented Spinal Irritability and Susceptibility to Attacks;

Superseded by Tracheotomy precisely in proportion to the Laryngismus and its Dyspnoea; leaving at the most, an Epilepsia Abortiva.

II. *Inorganic Apoplexy, which may be divided into the—*

- I. Apoplexia Mitior,
and this into
 - 1. Apoplexia Evanesens, with
 - 1. Vertigo; Confusion;
 - 2. Paralysis of Speech; of the Fingers;
of the Side, &c., &c.
- II. Apoplexia Trachelea, with
 - I. Trachelismus, denoted by—
 - 1. Flushing, Purpurescence, and
 - 2. Tumidity, of the Face and Neck;
 - 3. Vertigo, &c.
 - 4. Stupor,
&c., &c.
 - 5. Falling;
 - 6. Paroxysmal Paralysis.

- II. Apoplexia Gravior, or
Apoplexia Laryngea; viz.
 - I. Trachelismus;
 - 1. Purpurescence;
 - 2. Cerebral Congestion;
 - 3. Stupor; Coma;
 - II. Paralytic Laryngismus, with
 - 4. Stertor; from Paralysis by counter-
pressure of
 - 1. The Medulla Oblongata, and
thence of
 - 2. The Pneumogastric, and espe-
cially of
 - 1. The Recurrents; with
 - 2. The Pharyngeals, with
Dysphagia; of
 - 3. The Bronchial, with
Rales, &c.
 - 4. The Cardiac,
 - 5. The Gastric, with corre-
lative Derangements;
 - 6. Death.

- Augmented Spinal Excitability and Susceptibility to Attacks.
- The Treatment should be
equally free from Empiricism
in both; and consist in—
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Causes;
 - II. Giving
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 - 2. Gentle Emetics?
 - 3. Gentle but efficient
Aperients;
 - III. Attending strictly to
Posture;
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Hyoscyamus;
 - V. Subduing induced Suscep-
tibility by Strychnia;
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by Mercurials;
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I. And pass into *Inorganic Epilepsy*, which may be divided into the—

I. Epilepsia Mitior, and this into	II. Epilepsia Gravior, and this into	The Treatment should be equally free from Empiricism in both; and consist in—
<p>I. Epilepsia Evanesceas, with</p> <ol style="list-style-type: none"> 1. Obscure Trachelismus; 2. Oblivium, Confusion, Vertigo, &c. 3. Distortion of the Eyes, Features, Fingers, &c., &c. 4. Nutatio; Falling &c. 5. Faintishness; 6. Onirodynia; 	<p>I. Epilepsia Laryngea; involving the superior Laryngeal, &c., with</p> <ol style="list-style-type: none"> 1. Trachelismus; 1. Purpurescence; 2. Stupor; Coma; <p>II. Spasmodic Laryngismus,</p> <ol style="list-style-type: none"> 1. Dyscœpnea, 2. Convulsion, leading to 	<ol style="list-style-type: none"> 1. Avoiding the exciting Causes; II. Giving <ol style="list-style-type: none"> 1. Antacida; 2. Gentle Emetica? 3. Gentle but efficient Aperients; III. Attending strictly to Posture; IV. Subduing Excitement by Hyoscyamus; V. Subduing induced Susceptibility by Strychnia; VI. Removing organic Effects by Mercurials; VII. Restoring the general Health, by Air and Exercise, &c. and be founded on an adequate Diagnosis. VIII. Are there any Specifics?
<p>II. Epilepsia Trachelea, involving the Spinal Accessory, &c., with</p> <ol style="list-style-type: none"> 1. Aura; Flocci; Tinnitus; Odor Moschi, &c. 2. Manifest Trachelismus—Fixed Head; Tortollis Obstipitas; 3. Spasmodic Aura; 4. Laryngeal, Stridor, Cry, Dyspnoea; 5. Bitten Tongue, Lip, or Cheek; 6. Foam; Rattles, &c. 	<ol style="list-style-type: none"> 1. Coma, 2. Stertor, with III. II. II. 3. Augmented Coma; 4. Mania, 5. Amentia, 6. Spasmo-Paralysis, 7. Death. 	<p>Superceded by Tracheotomy precisely in proportion to the Laryngismus and its Dyspnoea; leaving at the most, an Epilepsia Abortiva.</p>
<p>III. Epilepsia Syncopalis, with</p> <ol style="list-style-type: none"> 1. Pallor, Lividity; 2. Syncope; 3. Sudden Death. <p>Hidden Seizures; Mania; Crime'—undeserved Punishment even to death'</p>		

“ Irritation of the Medulla Oblongata, and Congestion of the Cerebrum—

II. *Inorganic Apoplexy, which may be divided into the—*

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 - 1. Apoplexia Evanescent, with
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 - 2. Paralysis of Speech; of the Fingers;
 of the Side, &c., &c.
- II. Apoplexia Trachelea, with
 - 1. Trachelismus, denoted by—
 - 1. Flushing, Purpurescence, and
 - 2. Tumidity, of the Face and Neck;
 - 3. Vertigo, &c.
 - 4. Stupor,
 &c., &c.
 - 5. Falling;
 - 6. Paroxysmal Paralysis.

- II. Apoplexia Gravior, or
 Apoplexia Laryngea; viz.
 - 1. Trachelismus;
 - 1. Purpurescence;
 - 2. Cerebral Congestion;
 - 3. Stupor; Coma;
 - II. Paralytic Laryngismus, with
 - 4. Stertor; from Paralysis by counter-
 pressure of
 - 1. The Medulla Oblongata, and
 thence of
 - 2. The Pneumogastric, and espe-
 cially of
 - 1. The Recurrents; with
 - 2. The Pharyngeals, with
 Dysphagia; of
 - 3. The Bronchial, with
 Rales, &c.
 - 4. The Cardiac,
 - 5. The Gastric, with corre-
 lative Derangements;
 - 6. Death.

Augmented Spinal Excitability and Susceptibility to Attacks.

- The Treatment should be
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 tibility by Strychnia;
 - VI. Removing organic Effects
 by Mercurials;
 - VII. Restoring the general
 Health, by Air and
 Exercise, &c.; and be
 founded on an adequate
 Diagnosis.
 - VIII. Are there any Specifics?

Every case in medicine is a case for the individual practitioner in that individual case. If in future you should meet with a case of epilepsy, if this be complicated with laryngismus spasmodic or paralytic, if on this you believe that danger to life or mind or limb depends, you will of course weigh all those circumstances against the formidability of the operation of tracheotomy; and if you so judge that this remedy is incomparably of less severity than that danger or malady, you will of course perform it. The remedy is certainly heroic enough; but in some cases the malady is also herculean. I would bias no one, but I invite every one to examine well and judge for himself. In the first place, the diagnosis must be duly instituted; there must be laryngismus; the danger must be duly appreciated, and it must depend on this laryngismus; it must be considerable to justify the operation, and it must depend on the laryngismus to render that operation appropriate.

A considerable number of cases have occurred in which tracheotomy has been instituted in epilepsy. In the first, the success was immediate and perfect; life was instantly saved, and the farther fits prevented. In several, a failing mind has been restored, and the patient has returned to business after relinquishing it from incapacity. Two cases have occurred in this country; one, under the care of Dr. John Neill, of Philadelphia, the other, under that of Dr. Herrick, of Chicago. I have published these with a commentary in the *London Lancet* for *Sept.* 1853. Although the ultimate event was fatal in both, yet in both the immediate relief afforded by this operation was the most promising, and both those eminent practitioners state their unreserved approbation of the use of the remedy in the cases in question. I wish it were possible to adduce the whole of this paper on the present occasion:

CASE I.—John B——, aged twenty-nine, of five feet eleven inches in height, and weight about one hundred and sixty pounds. His appearance was healthy, and he had no deformity of the throat. His first fit occurred nine years ago, and was not referable to any particular cause by his family. He was not subject to them in childhood, although his brother had died of epilepsy. The frequency of the paroxysms gradually increased, and for the last year he has been unable to attend to any business. His mind has been so affected by the disease that he has frequently mistaken his way home, and often gone into the neighbor's houses for his own. His mother and wife informed me that, during the last six months, he would have an attack at least every other day, but occasionally would have as many as fifteen or twenty during the day. Life had become a burden to him, and he feared to

leave his home. His physician tells me that, on the first occasion of his being called to him, he was laboring under most severe congestion of the face and neck, producing great lividity and complete insensibility; and that, in all of the subsequent attacks, difficulty of breathing seemed to be prominent. The patient himself remarked to me that, immediately preceding his attacks, he frequently experienced a sense of constriction about his windpipe; and his friends and family confirmed the idea, that the severity of the attack was proportionate to the difficulty of breathing. When the operation was proposed, and its nature explained to him, he was anxious for its performance, and had great expectations of its relieving him.

The operation was performed on the 11th of March last, in the presence of Drs. Shelmerdine, Marshall Paul, and Hollingsworth.

His neck was long, and well adapted for the operation. The incisions were made in the usual way, and the only points worthy of remark were, that the sterno-hyoid muscles, from frequent spasmodic contractions, were thicker than usual; and that the isthmus of the thyroid gland was so large and broad as to cover the first three rings of the trachea. The hæmorrhage was not so troublesome as might have been expected; care was taken to tie the inferior thyroid vein, and no irregular artery was met with after the trachea was exposed. A piece of about three lines in breadth was removed from the middle of the fourth ring of the trachea, and the fifth ring also was divided, in order to accommodate more accurately the tube which had been provided, which was of the ordinary form of the instrument of the shops. The introduction of the tube produced but little irritation and coughing, his voice was not in the least affected; but the trachea was smaller than usual, and the wound became so deep after the division that I had constructed tubes of various angles and length corresponding with the depth of the wound.

He slept but little the first few nights after the operation, and seemed unwilling at first to trust himself in a recumbent position; but as the wound healed around the tube he became comfortable, and had nothing like a return of his complaint until the *thirteenth* day after the operation, which tendency to an attack he attributed to his removal of the tube: he had taken a slight cold, which made the tube disagreeable on that day, and he thought he would risk the night without it. The spasm was slight, and he did not lose his consciousness. About *two weeks* after this he was threatened with an attack of which he was conscious, and mentioned the fact to his mother, who immediately removed a temporary plug which he introduced in the orifice of his tube to prevent a whistling noise accompanying respiratory movements. Upon the removal of the plug the symptoms disappeared, his breathing was comfortable, and he felt much encouraged. He began to appreciate the object of the operation, and fully believed that the means to mitigate the severity of his attacks was the removal of the plug, and that the disease was under his own control. He made arrangements to renew his business, walked about the streets

in the confidence and consciousness of a strength of mind and purpose which he had not experienced for a long period.

Unfortunately for him, however, he was again seized, on the evening of the 2d of May, with symptoms of another attack. His physician was sent for, who removed the tube and cleansed it; after it was replaced the patient felt easier but was not completely relieved. In the middle of the night he had a most violent attack, and died almost instantaneously.* His physician was not with him when he died, and the family would not permit a post-mortem examination of any part of his body but his throat. Dr. Shelmerdine merely examined the cicatrix around the wound and the trachea. The parts had consolidated around the tube, and the trachea was perfectly healthy.

I report this case in order that men may form their own judgment upon the theory and treatment of Marshall Hall. Few cases have as yet been reported where this operation has been performed, and I believe that this is the first case in this country in which the trachea has been opened, and a tube worn, in order to mitigate, if not prevent, attacks of epilepsy. And, although this patient died, I still think favorably of the operation, and, under the same circumstances, would perform it again. His death was in no way attributable to the operation, and had not the operation been performed, it might have occurred at a still earlier period. I regard the mitigation of the attacks with which he was once threatened, and moderation of the symptoms, as more satisfactory than if there had been no approach of an attack, for then the entire absence of the complaint might have been attributed to the shock made upon the system by the operation; and this operation would have demonstrated nothing more than tying the carotid artery, after which, and other violent shocks, patients have been free from attacks for a long period.

CASE II.—Charles C——, an Irishman, aged forty years, was admitted into the United States Marine Hospital, Chicago, on January 9th, 1853. He was attacked at three o'clock, P. M., on that day with severe epileptic convulsions, which continued to recur at intervals of from one to two hours, and to become more severe and protracted under the use of chloroform and the various other means usually resorted to in such cases. At nine, P. M., the convulsions kept recurring every twenty or thirty minutes; the face and lips were swollen and livid; the pulse slow and weak; the breathing much obstructed by mucus in the air-passages, slow and stertorous; the veins of the face and neck distended.

The symptoms at this time being such as to justify the conclusion that the patient could not survive an hour unless relieved, the surgeon in attendance determined to make an opening into the trachea, below the glottis, as recommended by Dr. Marshall Hall.

This was accomplished by making an incision through the integu-

* There is reason to believe that the tube had fallen out, and that death occurred before it could be replaced.—J. N.

ments and the crico-thyroid membrane, into which a silver tube, a quarter of an inch in diameter, was easily introduced without loss of blood sufficient to require attention.

The operation was followed by a copious discharge of thick, tenacious mucus through the tube, and soon afterwards by a most marked improvement in all the symptoms; the breathing became more natural; the pulse stronger, the countenance less livid.

During the Monday and Tuesday, the 10th and 11th, the two days following the operation, there were in all but four convulsions, and these were much less protracted and severe than any of those previous to its performance.

On the evening of the 11th, the symptoms of pulmonary congestion, caused by the convulsions before the operation, and which had persisted, became suddenly more marked, and finally increased to such an extent as to bring on suffocation and death about four o'clock of that day.

The opinion of the surgeon who had charge of the case is, that the operation stopped entirely the dangerous convulsions, and that if it had been resorted to earlier, the patient would have recovered.

Unfortunately the public and the patient are apt to be unreasonable, and, when *everything* is not accomplished, to be discontented with the *much* that is done. Let me repeat that it is the removal of the effects of laryngismus that we undertake, and that trachelismus, and many effects, still dire enough, may yet remain. There may still be the forms of epilepsy which I have called *epilepsia trachelea* and *epilepsia syncopalis*; and these may prove fatal.

Observation and experience teach us that the effects of laryngismus are obviated by tracheotomy; the propriety of the institution of this operation in an epileptic seizure must depend upon the laryngeal character of the attack. In a case of severe *epilepsia laryngea*, if tracheotomy be performed, the case MUST at the least assume an abortive and mitigated form.

Similar remarks apply to the use of tracheotomy in other convulsive diseases—the infantile, the puerperal,—to tetanus and hydrophobia, &c. In hydrophobia, the very first symptom of the disease is a frightful strangulatory and suffocative laryngismus. The case has always proved fatal hitherto; and fatal by asphyxia, primary or secondary. If tracheotomy were instantly performed, the laryngismus would be disarmed. It would be disarmed of its attendant strangulation and suffocation. There could be no *fear* of these; there could be therefore no *hydrophobia*. The patient would *not* die as all have hitherto died, viz., of laryngismus and its effects! Querc.—Would they die?

Who can answer this question? For though he did not die of laryngismus and its effects, he might still be *worn out* by the convulsive paroxysms, in the absence of this, only the direct effect of the poison. Still no one can affirm that this would be the case, and the patient *might* recover, the first recovery of the kind since the world began.

As illustrative of this important question, I must now beg your kind attention to some experiments with strychnine, the last I performed before leaving England.

I gave to a healthy dog one sixth part of a grain of the acetate of strychnia. I waited fifteen minutes, when, no effect having occurred, I gave a second dose. In five minutes the animal became exceedingly excitable, and after being repeatedly thrown into convulsions, died, exhausted by them.

I treated a second dog in the same manner; but instead of subjecting it to excitement, I placed it on a soft bed, and locked it up in a room free from all disturbance. It was evening,—the next morning the dog was found perfectly well!

We had thus proof that when the spinal marrow is in an undue state of excitability, excitation will *kill*. It is by absolute quiet and freedom from excitement, that the animal and patient similarly affected, may be restored.

To a third dog, I gave a third dose of the acetate of strychnia. Without external excitation, this animal became convulsed and affected with laryngismus, and died speedily.

I now treated a fourth dog in the same manner, giving it a third dose of the acetate of strychnia. But I instantly performed the operation of tracheotomy, and I placed the animal, as I did the second dog, in a quiet room, free from disturbance. The next morning I learnt with much interest that the dog was alive, but refused to lap water or milk; and in the evening it died from the ultimate exhausting effect of the poison. It had however survived the dangers of laryngismus and of convulsive affection, viz., asphyxia and spinal exhaustion.

We must at least come to the conclusion, that tracheotomy possesses an application and a utility beyond what was formerly supposed. It becomes therefore a question, how this operation may be rendered as safe and as easy to perform as possible. Hitherto it has appeared formidable enough. I have known an hour consumed in its performance;

and I have known a little patient die under the surgeon's hands on the operation table. All this difficulty and danger may, I am convinced, be avoided—the operation may be rendered much more simple and much less bloody than heretofore.

My proposition is, indeed, to reduce it from that of *tracheotomy*, (from *τενω*, to cut,) performed by *cutting* instruments, to that of *tracheotomy*, (from *τενω*, to stretch,) performed by puncturing and stretching instruments. An instrument as simple in form and structure as a pair of sharp scissors or minute craniotome, may be made to penetrate the trachea, the skin being previously divided; the points of the instrument being then separated, a longitudinal transverse opening will be made by stretching, the tissues yielding readily; and a wire cage, such as I now shew you, may be easily introduced. It is the lightest, simplest, best means of keeping the tracheal orifice amply open, and free from obstruction by mucous. It is easily removed and replaced by the patient himself. It is then washed frequently. Such an instrument has been worn during many months without producing the slightest irritation or other inconvenience.

But I must here conclude. I thank you most cordially for your kind invitation to give this lecture and for your kind attention to it.

ART. II.—*Remarks on Elephantiasis Græcorum, with the Report of a Case.* By THOMAS POLLARD, M. D., of Richmond.

Elephantiasis Græcorum is a rare disease except in certain circumscribed localities, and it is only of late years that it has been properly described. Previously much uncertainty existed as to what the elephantiasis of the Greeks, or lepra of the middle ages, really was. Dr. Dezeimeris has elucidated this obscure point in a learned essay.* The Arabians applied the term elephantiasis to an hypertrophied and altered condition of the subcutaneous tissue of the lower extremities and scrotum, but the Grecians used it to designate a peculiar tubercular affection of the skin, the characteristics of which they wished to depict by comparing it to the hide of the elephant. Aretæus† described it ad-

* *Dict. de Méd.*, art. ELEPHANTIASIS.—*Bibl. Méd.* t. xi. 1835.

† *De Morb. acut.* LIB. ii.

mirably. Very recently Drs. Danielssen and Wilhelm Boeck have furnished us with a complete account of it, under the name of *Spédalskhed*, by which it is known in Norway.*

Elephantiasis Græcorum is known by the existence of numerous dark reddish shining tubercles, the colour frequently approaching lividity, and varying in size from a buckshot to an inch in diameter, situated on the face, or limbs, and often on both, and sometimes extending to the palate and fauces, and to the eyes and nose. They rarely exist about the body. These tubercles present a shining, glossy appearance, all the hair falling off from the affected part, and the skin presenting a dark brownish and dirty appearance. One of the most important characteristics of these tubercles is their insensibility, which exists in the great majority of cases. In some rare instances, however, the tumours and skin become exquisitely sensitive. When situated on the face the tubercles give it a swollen, enlarged aspect, and this peculiar and livid colour. Scales are said generally to exist on the skin between the tubercles. As the disease progresses some of the tubercles terminate in resolution, while in others suppuration and ulceration occurs. The ulcers are not deep, and generally heal without much difficulty. When about the hands and toes, gangrene and deep ulceration are apt to occur, frequently attended with mutilation of the extremities.

Of the *causes* of the disease we know but little. It has been attributed to hereditary transmission, the heat of the tropical climate, unwholesome diet, and even contagion, by different writers.

Galen† observes that in Alexandria many were afflicted with elephantiasis because they greatly used shell-fish and salted provisions. He adds that the distemper seldom appeared in Germany and Mysia, and was unknown among the milk-drinking Scythians. These considerations led the celebrated Cocchi‡ to suspect that elephantiasis might be referred to the scurvy. In certain parts of Norway and Iceland the disease is very common, attacking males rather than females, in the proportion of 6 to 1, and being transmitted hereditarily in the male line, according to the physicians of that country.

Its *prognosis* is very unfavorable, few cases recovering. Death generally occurs from irritative fever, or by extension of the disease to the larynx, trachea and lungs.

* *Traité de Spédalskhed ou Eléphantiasis des Grecs.* Traduit du norvégien par L. A. Cosson. Paris, 1848. 8vo., et atlas in-folio de 24 planches coloriées.

† *Method. Med. ad Glaucon.* LIB. ii., cap. 12.

‡ Del vitto Pythagor., p. 58, etc.

The *treatment* is of course unsatisfactory, and entirely empirical. In one case recorded in the *London Lancet* cure was attributed to the use of guaiacum. Among the native physicians of the East, the Asiatic pills (arsenic and black-pepper) enjoy a high reputation. At the commencement of the disease, irritant liniments and lotions are of advantage. Dr. S. Robinson* recommends the application of blisters to the diseased parts, and this treatment in the hands of Biett has recalled the sensibility of the skin when it seemed to be extinct.

Cazenave and Biett have more than once succeeded in arresting the disease temporarily by means of arsenical preparations and cantharides. Drs. Danielssen and Bocck have derived good results from the use of iodine.

A mild diet, unstimulating tonics, and soothing local applications, with proper exercise, no doubt are very proper, and aid in prolonging life.

CASE.—*August 1853*.—Mr. S, from South Carolina, aged 35, had spent much of his life in Brazil. One or both of his parents were Italian. When 12 or 14 years of age he recollects laboring under an affection of the fingers. About three years since he first observed some small tubercles about his face and thighs, since which time they have been gradually increasing. When he came under my care the tubercles on the face were large. Two of them had taken on superficial gangrene, which was followed by suppuration and ready cicatrization; one of the ulcers being as large as a 25 cent piece. His face presented the dark, livid, swollen appearance above described. The tubercles on the thighs were large and numerous, and were a source of considerable pain and irritation. The first phalanges of several of his fingers on both hands had been lost by the first attack of the disease when he was 12 or 14 years of age. The other phalanges were drawn towards the palm of the hand, giving this member a clubbed appearance. The pulse was very much disturbed, generally beating 120 to the minute. Appetite and nutrition very bad. The symptoms were at times very much improved, and again exacerbated.

Mr. S. had never used any regular prolonged treatment. During the summer he had been trying the waters of the Virginia Springs, without good effect. I directed for him an infusion of *prunus virginiana*, and soothing applications to the tubercles on the thighs, to the sores on the face poultices, and afterwards stimulating ointment.

September. Mr. S. called on me, temporarily very much improved, both in general appearance and feeling, in appetite and the condition of the circulation. I advised him to use cod liver oil internally, and to apply it locally to the tubercles.

* On the Elephantiasis as it appears in Hindostan. MEDICO-CHIR. TRANSACTIONS. 1819. Vol. x., p. 27.

December 16th. I received a letter from him dated a few days previously, in which he says: "My health seems somewhat improved. I am clear of fever, though I have had fevers for six weeks until now. My disease seems inclined to attack the joints now more than any other part of the body. The tubercles on the thigh seem to disappear at times, and are not so painful as when I was in Richmond. One of my feet has been swollen. I have not been able to use the cod liver oil, as it causes nausea. My appetite and digestion seem good."

ART. III.—*On a Case of Rupture of the Urethra from External Violence.* By GEORGE B. HUNTER, M. D., of Harrisonburg, Va.

Physical lesions of the male urethra are not uncommon. Besides the wounds made from within outwards by the catheter and instruments of lithotrity in inexperienced hands, by the rash use of the uretrotome, or the spontaneous rupture of the urethra behind strictures, and the wounds from without inwards caused by lithotomy or deep perinæal section, we may have accidental division or laceration of the urethra from external violence in any part of its course. The most frequent and important injury of this sort, is the laceration of the canal resulting from a fall upon the perinæum, or from a kick in that region.

The membranous portion of the urethra being but slightly protected by the surrounding tissues, is easily torn by a contusion upon the perinæum, though there may be no solution of continuity in the skin. Even when the canal is only bruised, ulcerative action is often set up, and a drop or two of urine having found its way into the cellular tissue, urinary abscess is established with perinæal fistula, or extravasation may occur with all its disastrous consequences. Hence after a slight injury even, in this region, rest, fomentation and leeches are very essential.

The *symptoms* of laceration of the urethra without division of the external tissues vary according to circumstances. There is usually a burning pain at the lacerated point, which may extend to the whole course of the canal. Complete retention of urine may be caused by the swollen condition of the parts, or, if the patient makes violent efforts to evacuate the bladder, the urine escapes at the injured point and is infiltrated into the cellular tissue of the scrotum, perinæum and

groins, speedily causing inflammation and sloughing; upon an attempt to pass the catheter, the solution of continuity is discovered. Blood flows from the urethra except in those cases in which the mucous membrane remains intact. The blood may form a cylindrical clot obliterating the canal. Rupture of the membranous portion of the urethra may be distinguished from rupture of a neighboring portion of the bladder, by the fact that in the latter injury the urine escapes continuously and not from time to time, and that the general symptoms are more intense.

The *prognosis* is governed by the extent and seat of the injury, and varies according as the urine is extravasated or simply retained; for, after all, it is the contact of the urine with the surrounding tissues which especially constitutes the gravity of injuries of the genito-urinary apparatus. The urethra is far more favourably situated in this respect than the ureters and bladder, for when it is ruptured the urine enters an extra-abdominal cellular tissue, which is separated from the peritoneum by several aponeuroses. Infiltration in this quarter is, of course, a much less serious matter than that which pervades the cellular tissue around the great serous membrane in wounds of the bladder or kidney, and, under proper treatment, it rarely proves fatal. We may say, as a general rule, that the nearer wounds approach the commencement of the urinary apparatus the greater is their gravity.

Contused wounds of the urethra usually produce most intractable strictures. The cicatrix, in fact, forms a true fibrous stricture, the hardest to cure and to keep cured.

It is unnecessary to enter into the various complications of rupture of the urethra on the present occasion.

In the *treatment* of wounds of the urethra, the principal indications are to relieve retention, to prevent infiltration, to moderate inflammation and favour reunion in the wound, and to obviate consecutive stricture.

The permanent catheter fulfils the three chief indications. It prevents swelling by its pressure, and although it causes pain and may favour the extension of inflammation, these ill-effects are counter-balanced by its preventing the accumulation of urine in the bladder, and its escape into the cellular tissue. If, notwithstanding this treatment, the urine passes along the sides of the catheter and is extravasated, free incisions must be made to give issue to it.

It is not, however, always easy, or even possible, to pass the catheter. The surgeon is often foiled in his attempt to penetrate the torn and retracted vesical orifice. In these cases it is always proper to expose the parts by perinæal section, and then insert and retain an instrument.

When wounds of the urethra refuse to unite, various methods have been adopted, among others the suture, which has succeeded in the hands of some English surgeons. Attempts have also been made to restore losses of substance by plastic operations. Segalas and Ricord have each reported a successful case of urethroplasty.*

The following case illustrates many of the foregoing remarks :

CASE.—On the 18th of September last, I was called to see John Holland, a stout, athletic man, of 28 years, who had been suffering from retention of urine for many hours.

It appeared that, on the evening of the 15th, the patient had been thrown from a saw-mill, and had fallen astride of a two inch plank with all his weight. The distance through which he fell was about ten feet.

We found the scrotum greatly swollen, and the penis and adjacent parts bruised and blackened. The bladder was enormously distended, and at intervals involuntary expulsive efforts occurred, which were exceedingly painful.

On attempting to introduce a catheter, extensive laceration of the urethra was discovered, the beak of the instrument passing laterally, or else downwards into the scrotum. When it was withdrawn, its apertures were clogged with blood. Having failed in reaching the bladder, notwithstanding the most careful manipulation, and the use of the warm bath and nauseants, I determined, with the concurrence of Dr. Williams, of Bridgewater, who was present, to cut down upon the seat of injury.

A messenger was dispatched to Harrisonburg, eight miles distant, for instruments. It was nearly night when he returned, and we agreed to postpone the operation until the next day.

September 19th. The patient passed a very bad night, notwithstanding the free use of opiates.

A little before seven I commenced the operation by making an incision two inches long in the perinæum, and then dissecting cautiously towards the urethra. I presently arrived at a cavity containing a large quantity of clotted blood ; when this was washed away the lacerated urethra could be felt, and a flexible catheter introduced through the penis, was brought out at the perinæal opening. The membranous portion of the urethra appeared to be obliterated as far down as the prostate, and that gland itself was apparently lacerated.

We attempted to find the orifice of the bladder, and succeeded in

* *Annales de Chirurgie*, Paris, 1841. T. ii., p. 62.—*Memoires de l'Acad. de Méd.* Paris, 1845. T. xi., p. 1, et suiv.

doing so *after nearly five hours labour*. The catheter brought away about three quarts of urine. The relaxation of muscles which followed produced temporary nausea and vomiting. The wound was united by the quill suture, and the catheter was fastened in its place. We then administered four cathartic pills, (the same that are recommended by your accomplished contributor, Dr. J. P. Mettauer.)

September 20th. I found the patient in a satisfactory condition. Upon raising him up, he passed about a pint of urine through the catheter. The swelling of the parts was somewhat diminished. I recommended the application of cold lotions.

September 28th. Dr. Williams and I have seen the patient on alternate days up to this date. Everything has gone on prosperously towards a cure. One of the testicles is still slightly swollen. Last evening he ate some indigestible food, and during his disturbed sleep, the catheter was displaced. He now urinates partly by the penis and partly through the wound. I attempted to replace the tube, but was unsuccessful. The patient has full control over the bladder.

October 10th. At this date the urine was voided by the urethra in a full stream, a few drops only escaping by the perinaeal fistula.

November 21st. On this day Mr. Holland came to my office, having ridden to town on horseback. He was perfectly cured, and assured me that he experienced no difficulty either in micturition or coition.

ART. IV.—*Of Inflammation of the Peri-uterine Cellular Tissue, and of Retro-uterine Phlegmon in particular.* By F. L. J. VALLEIX, Physician to the Hospital *La Pitié*, Paris. [Translated from *L'Union Médicale*. Nos. 125, 126, 127.]

It may be asserted, in a general way, that our knowledge of inflammation of the peri-uterine tissues is very vague. Systematic works on medicine undoubtedly contain cases of these lésions, but they are almost invariably instances of termination by suppuration,—true pelvic abscesses; so that we are led to believe that the tendency to suppuration in this disease is extreme, whereas I shall presently show that a very small minority of cases end in this way. This single fact proves that this affection has not been properly investigated, since only the rarest mode of termination is recognized at all.

Such an opinion is still farther confirmed by the fact that the disease is nowhere described separately. It is only incidentally mentioned in speaking of phlegmonous inflammation of the iliac fossa, of tumours of the pelvis, of inflammation of the broad ligaments, wherefore we may infer that the symptoms peculiar to it have been com-

pletely neglected. If, then, I show that it has its proper signs and symptoms, and two principal modes of termination; if, on the other hand, we can diagnosticate it with precision, it will not be doubted that this disease has often been overlooked. I may mention that M. Satis* and Dr. Bennett,† both of whom have furnished us with interesting researches upon uterine inflammations, do not allude to the affection which we are considering. I may add, however, that several English authors have recently treated of *pelvicellulitis*, but their descriptions are inexact, and inapplicable to the disease which I am about to discuss.

In eighteen months I have observed: 1. 19 cases of retro-uterine phlegmon; but only 11 of these were recorded with the necessary care; 2. 3 cases of ante-uterine inflammation; 3. 1 case in which the inflammation was seated on one side of the neck; 4. 2 cases in which there was inflammation anteriorly and posteriorly at the same time; in all 25 cases. Of this number, only 17 can be entirely relied upon in making out the history of this affection.

Definition.—I give the name of *peri-uterine* inflammation to that phlegmasia which occupies the vicinity of the point of junction of the neck and body of the uterus, and only accidentally extends to the broad ligaments. We know that there is a space between the anterior cul-de-sac of the vagina and the corresponding reflexion of the peritoneum, filled with fine cellular tissue, described by anatomists and surgeons, especially by Jobert (de Lamballe), who has dwelt upon the importance of this arrangement in the operation for vesico-vaginal fistula. It is at this point and at a corresponding posterior point, that the principal varieties of peri-uterine inflammation have their seat. In one case only have I found an inflammatory tumour upon one side of the uterus without any accompanying disease anteriorly or posteriorly.

The number of cases which I have cited, proves that this affection is quite frequent. Any one can convince himself of this, who, with a knowledge of the symptoms, explores the genital organs in the manner described hereafter.

Causes.—It is as yet impossible to indicate with precision all the causes of peri-uterine inflammation. As facts are accumulated, this knowledge will be supplied.

The age of my patients varied from seventeen to forty-two years.

* *Des inflammations des annexes de l'utérus et des ligaments larges.*—Thèse, Paris. 1847.

† *Treatise on Inflammations and other Diseases of the Uterus.* By Dr. Henry Bennett. Third edition. London: Churchill, 1853.

In no instance had the cessation of the menses occurred. This fact is valuable, for it proves that the inflammations we are describing are produced during the period in which the uterus enjoys all its functional activity.

I observed nothing deserving of mention in the *constitution* or *temperament*.

Of the 17 carefully recorded cases, 11 related to women with dysmenorrhœa, dependant upon congestion.

In 3 of the 25 cases, the patients laboured under uterine displacement, which had been treated by the uterine *redresseur*.* I do not place the use of this instrument among the proximate causes, because the inflammation did not arise immediately after the application of the pessary, but many days afterward, the menses having intervened, and no bad symptom having occurred in the interval. The inflammation may be thus explained. On the one hand, we know that the first return of the catamenia after the use of the stem pessary is characterized by increased abundance in the menstrual flow; the sanguineous fluctus, then, is greater than usual. On the other hand, we shall see that it is particularly during the menstrual epoch that the inflammation we are describing is produced; because, undoubtedly, the tissues which surround the uterus are the seat of an hyperæmia, which, when excessive, easily passes into inflammation. We can readily understand, therefore, how the reduction of the uterus, by favouring this hyperæmia, likewise favours the production of inflammation. We must not imagine that the instrument produces this effect by offering direct violence to the uterus or the tissues surrounding it. This may happen in some cases, if the pessary is applied carelessly, especially if the genital organs are already inflamed; but it did not occur in the cases I have cited.

Lastly, I have seen two cases in which the peri-uterine tissues were painful and swollen, and presented, in a word, all the symptoms of sub-acute inflammation, and in both of which the patients had, at several catamenial periods, acute inflammation of the retro-uterine tissue, of which the pre-existing inflammation was evidently the predisposing cause. The following is a striking example of this:

CASE I.—A dress-maker, aged 22, entered *la Pitié*, Ward S. Geneviève, No. 25, in 1852.

* Simpson's stem pessary, modified by Valleix; commonly called the *impaling uterine machine*. TRANSLATOR.

Her catamenia appeared at 13, and have always recurred regularly; she became pregnant at 15½, and was safely delivered at term. The following year she miscarried at two months, without any assignable cause. She continued to enjoy good health until her last pregnancy, during which she suffered from prostration and pains in the abdomen and loins. Three months and a half ago her accouchment took place. Everything transpired happily, and the patient left her bed on the sixth day.

Soon after, she suffered pain in walking, with a sense of weight in the rectum and fatigue in the limbs. She had occasional attacks of vomiting, and micturition and defecation were painful; coitus became excessively painful.

Five weeks before she entered *la Pitié*, she was treated in a neighbouring hospital. A blister was applied to the epigastrium, which relieved the vomiting, but the other symptoms were not amended. She only remained a week under treatment.

At the end of that period the catamenia appeared, but instead of lasting only four days as usual, they were protracted, and an abundant hæmorrhage, alternating with profuse leucorrhœa, lasted for twelve days. There were expulsive pains in the rectum, and lacerations in the abdomen. Urination and defecation were accompanied by severe suffering. The appetite disappeared. This condition lasted until the patient entered *la Pitié* twenty days ago. Her physiognomy expressed suffering, but was not anxious or contracted.

Upon a vaginal examination, we found the neck of the uterus inclined forwards, its orifice slightly gaping. The body of the uterus could not be felt by the hand on the abdomen, even when the organ was lifted by the finger in the vagina.

When the finger was carried to the posterior cul-de-sac, it detected a globular tumour, of doughy feel, immoveable, and very painful upon pressure. The tumour filled the concavity of the sacrum, and reached along the sides of the uterine neck as though it would embrace it. The tumour was felt compressing the rectum when the finger was introduced into that cavity. The abdomen was yielding, undeformed, painless upon pressure.

The pulse, although feeble and slightly accelerated, was regular. The first sound of the heart was accompanied by a very faint bellows murmur.

I did not wish to use the catheter immediately, for fear of occasioning too much pain, and I prescribed: 10 cups upon the abdomen; cataplasms; emolient vaginal injections containing opium; an opium pill; a laxative enema; repose in bed, and diet.

Two days subsequently the appetite returned. The pain had so much diminished that I was able to introduce an uterine sound. It entered without encountering the slightest obstacle, and while it was in the uterine cavity, the tumour already alluded to was felt distinctly behind the cervix. (*Baths. Repose. Laxatives.*)

Under this treatment the tumour gradually diminished, and the other symptoms disappeared. On the tenth day all spontaneous pain had

subsided, but pressure still produced pain. On the fifteenth day there was no pain on pressure, and the tumour was reduced to half its volume.

On the twentieth day its existence could hardly be detected; the strength had returned, and the patient left the hospital.

Reflections.—What was the disease from which this woman suffered before she entered the hospital? Was it not an affection altogether similar to that for which she was treated? There is every reason to believe so, for the symptoms were the same. Moreover it is not uncommon to meet with cases of relapse at longer or shorter intervals, so that this case, regarded from that point of view, is not at all exceptional.

The disease appeared at the catamenial period, and there was considerable menorrhagia. There is nothing extraordinary in this, for this affection begins at the menstrual epoch in the great majority of cases, and there was a sub-acute inflammation of the womb, as was shown by direct exploration; now, according to the recent researches of Hérard, metrorrhagia is a common symptom of metritis.

In a single case, out of 17, the disease supervened a short time after delivery. Perhaps this may hereafter be found to be a more common cause. It is remarkable, however, that it should apparently have had so little influence in the cases I have observed, when it is recollected how frequently inflammation attacks the broad ligaments after parturition. We must not confound with these cases those in which inflammation existing primarily in the iliac fossa subsequently invades the cellular tissue around the neck, because, in the latter, there is a simple extension of inflammation.

Inflammation of the uterus and vagina may nevertheless extend to the peri-uterine tissue, and produce the disease which we are considering. I observed an instance of this in a girl of 17, who had contracted a vaginitis. The inflammation attacked the uterus and subsequently the peri-uterine tissue; the extension of the inflammation caused acute pain, and produced a tumour which suppurated.

In one case, the peri-uterine inflammation occurred after excessive indulgence in coition.

In all the other patients, there was no appreciable proximate cause. During the catamenial period severe pains occurred; fever lighted up, and the disease declared itself.

Symptoms.—The symptoms of this affection are very characteristic,

and admit of a positive diagnosis. They differ in some respects according to the seat of the disease, which we consequently divide into three principal varieties. The first is *retro-uterine phlegmon*; the second is *ante-uterine phlegmon*; and the third is a combination of these two species. In describing the first species I shall make known the symptoms which are common to the three; it will be sufficient afterwards to indicate the peculiarities of the two others.

1. RETRO-UTERINE PHLEGMON.—*Outset*.—Before experiencing the characteristic symptoms of the disease, all of the patients suffered for some hours from malaise and a sense of weight and heat in the rectum. Six out of eleven had a marked chill. In all there was loss of appetite and constipation.

The first symptom of the confirmed disease is pain. Spontaneous pain is a constant symptom; it is always considerable and sometimes excessive. It comes on with violent exacerbations, which are sometimes unendurable, the patients rolling on their beds, contorting their bodies, and uttering cries. They describe the pain differently. Some complain of a sensation of burning, others of a painful throbbing, the majority of a violent lancinating pain. Pain upon pressure is not less constant; it is developed by pressure upon the hypogastrium, by percussion, by vaginal exploration, and especially by the passage of fecal matters through the intestine. Defecation causes acute suffering in the region of the sacrum and anus, and is usually the signal for one of those violent exacerbations already described.

There is one constant and remarkable symptom which deserves especial mention. I refer to the expulsive pains which are felt in the rectum. The patients experience the sensation of a foreign body in the gut, which induces ineffectual contractions, and which depends upon two different causes: upon the pressure of the inflammatory tumour upon the anterior wall of the rectum, and upon the propagation of the inflammation to the coats of the intestine, which is manifested by the expulsion of mucus. These pains, which have been already remarked in retro-uterine hæmatocèle, are more striking in the disease of which we are speaking, and amount to something characteristic.

By the finger in the vagina, a tumour is discovered behind the neck of the uterus, and separated from it by a deep furrow. When this tumour is very large, it completely effaces the posterior cul-de-sac, as I observed in a case which I shall mention farther on, which terminated in suppuration. The size of this tumour is usually equal to the half

of a hen's egg; the angle formed between it and the cervix almost equals in depth the posterior vaginal cul-de-sac. The transverse rugæ of the vagina may be felt upon the surface of the tumour, which is immoveable, of soft consistence, but without fluctuation. The contact of the finger at this point gives great pain. We shall find, when we come to speak of the diagnosis, that this state of things so closely simulates retroflexion, as to have often been mistaken for it.

Exploration by the rectum causes great pain, and may usually be dispensed with. It enables the physician to feel a tumour in front of the gut.

When the tumour is of greater size, its surface is smoother, but not so much so as in retro-uterine hæmatocele. By one finger in the vagina and another in the rectum its inferior portion may be pressed, and we may judge of the amount of thickening in the recto-vaginal partition in which it is developed. Occasionally, at a certain period of the disease, manifest fluctuation may be detected in this way.

At the same time, the finger in the vagina finds heat, pain, and throbbing in the neck of the uterus; in a word, all the signs of inflammation of that part are manifested. By palpation, with the hand on the hypogastrium, we find that the other peri-uterine tissues, the broad ligaments, etc., are yielding and exempt from inflammation.

A speculum examination is extremely painful and is generally useless. It may show the visible symptoms of inflammation of the cervix, which has already been revealed by other symptoms.

As regards the digestive organs, the symptoms are usually limited to loss of appetite, slight thirst and nausea, and obstinate constipation with the expulsive pains I have already mentioned; or, when the inflammation extends to the rectum, diarrhœa comes on, with tenesmus, and mucous passages similar to those of dysentery.

In two cases, bilious vomiting, continual nausea and slight salivation, were conjoined with the preceding symptoms. The inflammation, in these instances, had evidently spread to the peritoneum, as was shown by the hypogastric tenderness, etc.

There was no derangement of the urinary organs so long as the ante-uterine cellular tissue was not involved.

The pulse was moderately accelerated in the majority of cases; in the two instances in which the neighbouring peritoneum became involved, it rose to 108 and 114, and became small and feeble; in

other cases it was never beyond 90, and preserved its ordinary volume.

The face was always anxious, and, during the exacerbations, expressive of the greatest suffering.

The decubitus was usually dorsal, the head being raised and the trunk slightly flexed.

I have never observed any cerebral symptoms.

Such are the symptoms of this disease. In cases in which suppuration is established they are modified, and then rapidly amend when the abscess opens and liberates the confined pus. But I shall return to this point in speaking of the terminations of the disease.

2. ANTE-UTERINE PHLEGMON. As I have already mentioned, I have only observed this inflammation in an isolated form three times. The symptoms peculiar to it are the following: The patients experience acute pain in the hypogastrium with exacerbations. The finger in the vagina finds the posterior cul-de-sac perfectly free and yielding. In the anterior cul-de-sac, on the contrary, it discovers a tension, an unusual resistance caused by inflammation, and not a rounded and circumscribed tumour as in the preceding variety. The condensed nature of the tissue uniting the vaginal wall to the bladder, explains this difference. The lateral limits of this tension cannot be perceived distinctly. Pressure upon the tense parts occasions the most acute pain, and the same result is caused when traction is exercised upon the part by pushing the cervix uteri backwards.

Another constant symptom is the pain caused by the vesical contractions during micturition. Frequent and irresistible desire to urinate also supervenes.

All of the symptoms described under the former variety, except those which have their seat in the rectum, belong equally to this. I have remarked, however, that peritoneal symptoms were more commonly manifested in the ante-uterine variety; because, no doubt, inflammation extends upwards with more facility in the direction in which the tissue is looser.

3. ANTE AND RETRO-UTERINE INFLAMMATIONS COMBINED.—This variety does not require a separate description, since a portrait of the disease may be had by adding the symptoms peculiar to each of the other varieties to those which are common to both. It is sufficient, therefore, to mention it. I have seen but two cases of it; in these in-

flammation appeared first in the parts behind the cervix, and was not developed anteriorly for two or three days.

As to the case in which the inflammation was located on one side of the cervix, inasmuch as the tumour inclined backwards towards the rectum, the symptoms of the first variety predominated.

Progress, Duration and Termination.—The progress of the disease should be studied with the greatest care, for it furnishes matter for the most important considerations. It presents, as I have already repeatedly mentioned, violent exacerbations. These occur even when the inflammation remains limited to the parts posterior to the uterus, and can only be explained, under these circumstances, by the successive invasion of many closely connected portions of the peri-uterine tissue. When inflammation extends to more distant parts, as the lateral or anterior cellular structure, these extensions also occur at intervals, and account for the exacerbations.

These intervals of violent pain and relative calm give this affection a peculiar physiognomy, with which the physician must be well acquainted not to be led into error. The first symptoms are violent, they amend rapidly under treatment, or even disappear altogether, and the physician may imagine that the disease will gradually subside; but it is not so. At the end of eight, ten, or even twenty-four hours, the symptoms return with increased intensity, and so proceed in an irregular intermittent form for six or eight days. In some cases I have even known this intermittency to resemble periodicity so closely as to induce the attendants to administer sulphate of quinia.

The *duration* of the affection, *when it terminates in resolution*, is usually eight or ten days. After this period, however, a painful induration still remains at the part which was inflamed, and the patients should be very prudent. *When the disease terminates in suppuration*, the symptoms are more protracted, because several days elapse before the purulent collection forms; after this, a natural or artificial opening into the tumour promptly relieves the patient's sufferings.

The disease ordinarily terminates in resolution. In 25 cases, I have seen suppuration only twice in retro-uterine inflammation, once in ante-uterine inflammation, and once when inflammation occupied both the anterior and posterior cellular tissue; in all, 4 cases out of 25. This is a very important point, for it proves that this disease has been often misunderstood, since it has only been studied in those cases in which

it has produced an abscess, and yet it is not less strikingly characterized when it terminates by resolution.

Fluctuation is readily detected only in the retro-uterine variety, and in those cases alone of this form in which the tumour projects considerably between the rectal and vaginal walls. In all of the cases which I have observed the pus found its way into the vagina; we can easily conceive, however, that the abscess may open into the rectum. When the tumour opens spontaneously into the vagina, the genital organs are found bathed in pus, but it is usually impossible to discover the orifice by which that liquid escapes, concealed as it is in the folds of the vagina.

In some instances the pus has been evacuated by the bistoury, as was done in the following case :

CASE II.—*Retro-uterine Phlegmon.*—*Termination by suppuration.*—Marie Gautrou, aged 30, entered *la Pitié*, May 3d, 1853, Ward S. Geneviève, No. 26.

This woman gave birth to her first child on the 21st of February 1853. Her labour was natural, and only lasted six hours; she was delivered of a male child, at term. Three days afterwards she was attacked by high fever and nervous agitation, and was bled; she got up in nine days.

A fortnight after her confinement, without having had either chill or fever, she was seized with violent pain in the hypogastrium, especially on the right side, with cramps in the limbs; at the same time there was a slight oozing of blood from the vagina. She simply applied cataplasms on the abdomen.

For the last fortnight she has been more sick. She has had pain in the left iliac fossa during her catamenial period; defecation has become difficult and painful, and she suffers from colics and expulsive pains in the rectum.

May 4th. Upon percussing the hypogastrium, we found dullness for three fingers breadth above the pubis. Upon palpation, the fundus of the uterus was felt to be large and rounded. By the finger in the vagina, it was ascertained that both the body and neck of the uterus were carried slightly forwards. Behind the cervix, which was patulous, we perceived a fluctuating tumour, which seemed to be a part of the uterus. The posterior cul-de-sac was obliterated. The tumour had a smooth surface, was soft, and very painful on pressure. It descended to the commencement of the middle third of the posterior wall of the vagina. Upon introducing the middle finger into the rectum and the index into the vagina, the tumour could be felt between the two.

The tumour obtruded upon the rectum, and gave rise to tenesmus. The pulse was normal, and the heat of skin was not augmented. (15

leeches to the hypogastrium ; emollient enemata with opium ; emollient injections ; cataplasms.)

May 8th. The tumour projects farther into the vagina, and presents fluctuation. The sense of weight in the rectum and the tenesmus continues ; the patient passes only a little liquid matter in her stools. There is still pain and resistance upon pressure in the hypogastrium. (*Emollient injections and cataplasms ; an opium pill ; 12 leeches to the hypogastrium.*)

May 10th. There is less prominence in the vagina ; fluctuation is evident ; the pain has diminished. There have been neither chills nor horripilations, but the pulse is somewhat accelerated and the heat of surface is increased.

May 13th. The patient has suffered much less since the leeches were applied. The vaginal wall of the tumour has become very thin.

On the night of the 19th the tumour opened spontaneously, but a very small quantity of pus escaped. The next day I made a large opening with the bistoury, and gave issue to the remainder of the purulent collection.

Four days afterwards the tumour had almost disappeared, and the pain had greatly diminished.

The 25th of June the patient left the hospital perfectly well, with the exception of a slight induration of the recto-vaginal wall.

Reflections.—In this case we have all the symptoms of retro-uterine phlegmon, uncomplicated with peritoneal inflammation. The patient had been delivered two months and a half when she came under my observation. Should we refer the commencement of the retro-uterine inflammation for which she was treated to the period at which she experienced pain in the hypogastrium and cramps in the limbs, two weeks after her confinement ? I think not. An inflammation of this sort may have existed at that period, but it must have subsided spontaneously, for the patient was free from pain until the occurrence of the characteristic symptoms which appeared a fortnight before her entrance into the hospital. Most probably there was simple metritis on the first occasion, for, it will be remarked, there were then none of those symptoms about the rectum which give the disease we are considering its peculiar physiognomy.

When the inflammation is located in the parts anterior to the uterus, pus may likewise find its way into the vagina, as I have seen it do in one instance. I know of no case, however, in which such an abscess has been opened by the knife ; for, under these circumstances, the tumour is not prominent, and it is difficult to detect fluctuation.

In one instance I have known the abscess to open into the bladder. This accident was announced by frequent desires to urinate, pain after

micturition, and the presence of a quantity of foetid, greyish, diffuent pus in the urine.

Lastly, the inflammation sometimes extends to the broad ligaments, and the disease then assumes other symptoms, with which every one is acquainted.

Anatomical Lesions.—As peri-uterine inflammation is not in itself a cause of death, we should be ignorant of its exact morbid anatomy had not the extension of the inflammation, or the rupture of an abscess, occasionally given rise to fatal peritonitis, or some other grave lesion. In such cases there have been found in the reduplication of the vaginal wall and rectum, or in the cellular tissue uniting the bladder and uterus, abscesses containing phlegmonous or sanious pus, and the different openings into neighbouring cavities to which I have already alluded. It would be useless to enlarge upon this point.

Diagnosis.—The diagnosis of this disease was very difficult before the introduction of the modes of exploration which we now possess. The affection was then only recognized by a few physicians, and by them only in those cases in which an abscess formed. I have myself witnessed many very pardonable errors of diagnosis.

Retro-uterine phlegmon is most likely to be confounded with retroflexion. A vaginal exploration gives almost identical results in the two cases. In both the cervix is a little forward, there is a tumour at the posterior and superior portion of the vagina, and a deep sulcus between the cervix and the tumour. The tumour is harder and less painful in retroflexion, it is true, but these are insufficient distinctions. Doubt is immediately removed, however, by the employment of the uterine sound. In retro-uterine phlegmon this instrument readily enters the uterine cavity, and penetrates an inch or more, *and the tumour remains immovable*. Sometimes the inflammatory swelling is so great that the womb is deviated to the right or left. If, then, there is some difficulty in introducing the sound, it is not necessary to employ force, but the beak of the instrument should be gently inclined to the right and left, and it will presently advance towards one or the other of the iliac fossæ.

I have been consulted three times for supposed retroflexions, which were nothing but inflammations of this sort. In two of them, painful pressure had been employed with a view of reducing the deviation. The mode of exploration which I have described proved the error

which had been committed, and the patients recovered under the treatment which I shall presently detail.

The same method of diagnosis will distinguish retro-uterine phlegmon from a tumour of the posterior wall of the uterus, from an ovarian tumour, etc.

Inflammation of the cellular tissue between the cervix and bladder may be mistaken for cystitis. The circumscribed pain and tension in the anterior vaginal cul-de-sac, and the gastric and peritoneal symptoms will suffice to prove the existence of the first of these two affections.

Prognosis.—Notwithstanding the severity of the symptoms, the prognosis is not grave. It only becomes so when inflammation extends to other parts; but then we have another disease. The most favourable point of opening for the abscess is the vagina.

Treatment.—The treatment of these affections may be summed up in a very few words.

General and local blood-letting should be employed in the first instance with considerable energy. I have principally relied upon cups and leeches, and have almost always had to employ them three or four times to combat the exacerbations to which I have alluded. They invariably produce some relief.

The second method consists in the application of very small blisters, dressed with a salt of morphia, (gr. $\frac{1}{2}$ to gr. j.) I direct them to be renewed as often as they dry up. By calming the pain, they render the progress of the disease more uniform. Their good effect was manifest in every case.

As adjuvants, we have cataplasms, hip-baths, emollient and narcotic injections, narcotics internally, ice, Seltzer water, and the potion of Rivière* in case of vomiting.

When constipation is obstinate, as it usually is, a laxative should always be administered. It may consist of magnesia, citrate of magnesia, sulphate of soda, etc.

Lastly, diet and the most absolute rest, complete this simple treat-

* The anti-emetic potion of Riviere consists of : Citric acid, grammes ij., (gr. xl.); Simple syrup, gram. xxv., (℥j.); Bi-carbonate of potassa, gram. ij., (gr. xl.); Water, gram. cxx, (℥ivss.) The American measurements are only approximate, but the proportions are observed.—(Taken from the *Formulaire des hopitaux de Paris*.) TRANSLATOR.

ment, by the aid of which the disease almost always terminates by resolution.

When abscess occurs it may be opened with the bistoury; but this operation should not be attempted unless the tumour projects considerably into the vagina, and fluctuation is unmistakeable. When the abscess opens spontaneously, the orifice is sometimes too small to allow of the perfect evacuation of the pus. Under such circumstances the opening should be enlarged by a probe-pointed bistoury, the parts being exposed by a bi-valve speculum. If the spontaneous opening cannot be discovered, a simple puncture should be made, after which the probe-pointed knife may be used as before.

When the pus flows into the vagina, emollient injections should be frequently employed; or if it escapes by the rectum or bladder, it is equally useful to wash out these organs with some emollient liquid.

ART. V.—*Description of Eight Skulls of Flathead Indians from Columbia River.* By CARTER P. JOHNSON, M. D., Professor of Anatomy and Physiology, Richmond, Va. [With two Plates.]

In the justly celebrated "*Crania Americana*" of Dr. Samuel George Morton, there are described the measurements of eight skulls of the Flathead tribes of Columbia river. In the eighth section of the second part of "*Schoolcraft's history, condition, and prospects of the Indian tribes of the United States*," upon the "*Physical type of the American Indians*," also written by Dr. Morton, (the last labour of his life) seven additional skulls of these tribes are described. These fifteen skulls are all of which I have seen any accurate measurements, though others may have been published in papers to which I have not had access. Any thing which may add to the slender stock of accurate statistical information which we possess with regard to these tribes will be interesting to the public and particularly to the medical men of America.

The skulls which I propose to describe were sent to me some time since by Dr. Charles H. Smith, U. S. A., and were taken by him from an Indian mound on the banks of the Columbia river in Oregon. Of the exact location of the mound he has not informed me, and I am



therefore not able to state to which of the many Indian tribes inhabiting the banks of the Columbia river these skulls belonged.

The skulls are all in a good state of preservation, with one exception, they are all adult skulls, none however presenting indications of great age. They may therefore be taken as good types of the class to which they belong. The specimen No. 8 in the catalogue (vid. table), is not fully developed. The posterior molar teeth have not made their appearance at all, and one of the second molars has but just presented itself beyond the margin of the alveolar process; the remaining three second molars are fully out. In giving the mean of the measurements of these skulls this one will be omitted.

The appearance of these skulls is very singular, and with our idea of physical beauty, we find it difficult to credit the statement that such a conformation is actually regarded as a mark of beauty by those tribes among whom it is found, and that it is so highly valued that their slaves, who are for the most part derived from the adjacent tribes, are not allowed to imitate it. The most prominent deviations from the usual conformation of the skull are the great flattening of the frontal and occipital bones, and the consequent diminution of the antero-posterior diameter and the increase of the lateral diameter of the skull (vid. figs.*). The vertex is pushed backwards and the vertical diameter diminished (vid. fig.*) The basal aspect of the skull is very much altered; the face, retaining its usual width, seems very much disproportioned to the cranium, the lateral enlargement of which is here strikingly seen (fig. 1). These alterations exist of course in different degrees, in different specimens according to the degree and the duration of the compressing force employed, as will be evident from an examination of the table of measurements. Owing to the difficulty of applying the compressing force uniformly, I presume, very great distortion is sometimes produced. All of the skulls in my possession are strikingly non-symmetrical, but two of them, Nos. 6 and 7 of the catalogue, are particularly distorted, and in both the flattening has been produced principally upon the left side, leaving the capacity of the right side of the cranium very much the greater. In two of the eight skulls which I have, the frontal suture remains entirely perfect from the sagittal to the fronto-nasal suture. Can this be in any manner the result of the compression of the frontal bones? In seven of the eight, "ossa wormiana" are found, some of them very large.

According to Dr. Morton,* this custom of flattening the head obtains among many tribes, among which are the Klickatats, Kalapoo-yahs, and Multnomahs of the Wallamet river and its vicinity; and the Chinouks, Clatsaps, Klatstonis, Cowalitsks, Kathlamets, Killemoohs and Chelakis of the lower Columbia and its vicinity. It may not be uninteresting to state the mode in which this curious deformity is produced by these numerous tribes. It will enable us to appreciate their moral sensibilities to some extent.

“The mode by which the flattening is effected,” says Mr. Townsend, “varies considerably with the different tribes. The Wallamet Indians place the infant, soon after birth, upon a board, to the edges of which are attached little loops of hempen cord or leather, and other similar cords are passed across and back, in a zigzag manner, through these loops, enclosing the child and binding it firmly down. To the upper edge of this board, in which is a depression to receive the back part of the head, another smaller one is attached by hinges of leather, and made to lie obliquely upon the forehead; the force of the pressure being regulated by several strings attached to its edge which are passed through holes in the board upon which the infant is lying, and secured there.”†

“The mode of the Chinouks, and others near the sea, differs widely from that of the upper Indians, and appears somewhat less barbarous and cruel, a sort of cradle is formed by excavating a pine log to the depth of eight or ten inches. The child is placed in it on a bed of little grass mats and bound down in the manner above described. A little boss of tightly plaited or woven grass is then applied to the forehead and secured by a cord to the loops at the side. The infant is thus suffered to remain from four to eight months or until the sutures of the skull have in some measure united, and the bone become solid and firm. It is seldom or never taken from the cradle, except in case of severe illness, until the flattening process is completed.”

It is not wonderful that the result of this process, to which these unfortunate babies are subjected is “often ulceration of the scalp and perhaps, not unfrequently, death itself.” Three of the skulls in my possession present distinct evidences of ulceration of the frontal bones themselves, and one of them, the youngest, presents upon the frontal

* *Crania Americana*, p. 203.

† TOWNSEND, *Journey to the Columbia River*, p. 175.

bone and the adjacent part of the parietals, that honeycomb appearance so familiar to the pathologist as the result of syphilitic disease.

In making the measurements of these skulls, I have endeavoured to conform to the table of Dr. Morton in his "*Crania Americana*," in order that the two sets of measurements might be easily compared. I have not thought it important to ascertain the cubic capacity of the different regions of the cranium, and I have accordingly omitted this altogether.

In order that those readers who have not access to the "*Crania Americana*" may understand the table given below, it will be necessary to define accurately the various measurements.

The *longitudinal diameter* is measured from the most prominent part of the os frontis, between the superciliary ridges, to the extreme end of the occiput.

The *parietal diameter* is measured between the most distant points of the parietal bones which are for the most part the protuberances of these bones.

The *frontal diameter* is taken between the anterior inferior angles of the parietal bones.

The *vertical diameter* is measured from the fossa between the condyles of the occipital bone to the top of the skull.

The *inter-mastoid arch* is measured, with a graduated tape, from the point of one mastoid process to the other, over the external table of the skull.

The *inter-mastoid line* is the distance, in a straight line, between the points of the mastoid processes.

The *occipito-frontal arch* is measured by a tape over the surface of the cranium, from the posterior margin of the foramen magnum to the suture which connects the os frontis with the bones of the nose.

The *horizontal periphery* is measured by passing a tape around the cranium so as to touch the os frontis immediately above the superciliary ridges and the most prominent part of the occipital bone.

The *length of the head and face* is measured from the margin of the upper jaw to the most distant point of the occiput.

The *zygomatic diameter* is the distance in a right line between the most prominent points of the zygoma.

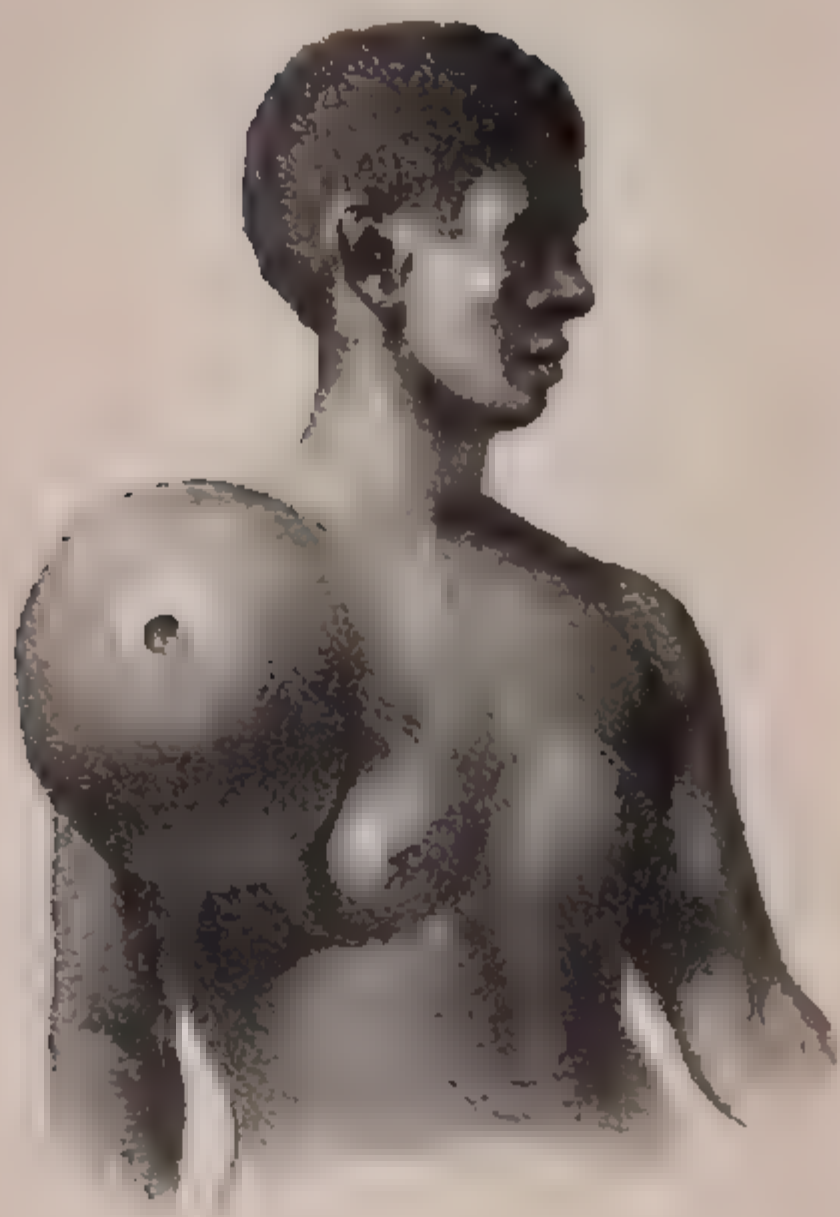
No. in Catalogue of Museum.	Plate.	Longitudinal Diameter.	Parietal Diameter.	Frontal Diameter.	Vertical Diameter.	Inter-mastoid Arch.	Inter-mastoid Line.	Occipito-frontal Arch.	Horizontal Periphery.	Length of Head and Face.	Zygomatic Diameter.	Internal capacity in cubic inches.
1		6.7	5.11	4.10	4.3	14.8	4.6	13.1	20.6	11.6	5.9	87
2	1	6.1	5.9	3.11	4.7	15.6	4.2	13.7	20.3	12.4	5.10	78
3	3	6.4	5.8	4.9	5.0	15.1	4.6	13.7	20.2	14.3	6.4	81
4		5.8	6.1	4.2	3.11	13.9	4.3	12.5	19.9	12.0	5.8	70
5	2	5.2	6.4	3.10	4.5	15.0	4.4	13.1	19.5	11.7	5.6	83
6	4	6.2	5.11	4.2	4.3	14.5	4.6	13.8	20.6	12.0	5.7	85
7		6.44	5.10	4.11	4.5	14.6	4.3	13.0	20.5	12.9	5.7	87
8		6.0	6.1	4.2	3.10	13.0	4.3	13.3	20.6	11.10	5.0	80

ART. VI.—*Case of Osteoid Cancer, with Remarks.* By A. E. PETTICOLAS, M. D., Demonstrator of Anatomy, etc. Richmond, Va [With a Plate.]

The following case formed a part of Dr. Mayo's *Clinical Reports* in the last number of this Journal. It was already in type when symptoms of relapse of the tumour appeared in the cicatrix, and was set aside until the progress of the disease might allow a complete history to be prepared. The accompanying lithographic sketch, drawn from life, represents the original aspect of the tumour prior to an operation.

CASE.—*Ossaceous Tumour weighing 4½ pounds removed from the Arm.* (Under the care of Professor Johnson).

Cynthia, a negro woman, æt. 25, was sent to the institution on the 27th of October, 1853, to be operated upon for a very large hemispherical tumour projecting from the right arm and shoulder.



The account she gives of herself is as follows: About nine years ago she noticed a small lump in the anterior fold of the axilla, about an inch in length and easily slipped about under the skin. It underwent no enlargement until the first of September 1853, when after carrying some wood upon the shoulder of that side, she experienced great pain in the part, and a rapid increase in the size of the tumour, and in the course of two months it has attained the enormous growth it now presents, extending from the acromion process above, along the anterior aspect of the arm to within four inches of the elbow joint, and running over upon the chest to within three inches of the middle line of the sternum. Its circumference at base is twenty-two inches.

Its external appearance is very smooth and shining. There is an ulcerated point at the apex about the size of a ten cents piece. The patient says that the tumour burst at that point two days since and discharged about a pint of blood. The general feel of the mass is hard and bony, though at one or two points there is a distinct sense of fluctuation. The humerus may be freely rotated without effecting the slightest change in the position of the tumour and the clavicle traced throughout its whole extent.

The patient has enjoyed remarkably fine health until two months since, when she began rapidly to emaciate.

October 29th, 11, A. M. The patient was carried into the amphitheatre in the presence of the class to undergo the operation. Chloroform was freely administered until complete anæsthesia was induced. An incision was made surrounding the base of the tumour and the mass rapidly dissected out and removed. It was found to lie immediately upon the shoulder joint, the capsule of which was exposed by its removal. During the operation a cyst was laid open causing no little uneasiness at first. Its fluid contents which had all the appearance of venous blood, came welling up in considerable quantity from the cavity, and gave rise to the supposition that a very large vein had been opened; such however was fortunately not the case.

Although very little blood was lost, the patient was so much prostrated as to require the free use of ammonia, brandy, and mustard poultices while upon the table. These stimulants were continued for some four or five hours after the operation when reaction came on. Since then, there has not been a bad symptom; all the ligatures have come away and the wound is rapidly filling up by granulation.*

The progressive improvement of the patient, as described in the above report, continued up to December 26th, the wound contracted and was healing rapidly. The woman's general health was greatly ameliorated. She slept soundly, ate with appetite, and gained flesh and strength daily. All the symptoms seemed to augur a favourable

* Upon examination the tumour was found to consist of numerous plates of bony matter, with cavities running in various directions filled with a fluid very much the colour of venous blood.

issue. At the date above mentioned, however, a small clump of granulations, resembling in its redness and turgidity an ordinary nævus, was noticed at the centre of the uncicatrized portion of the wound. Its steady increase in size was soon apparent. Nitrate of silver freely applied to this (then) diminutive tumour, produced no salutary effect. The passage of a double ligature around its base was alike insufficient in destroying it or checking its growth. Caustic, potash and chloride of zinc, used in succession, were found of as little value in the case as the milder remedies. Day by day the size of the mass augmented, extending its base, opening out into lobes, and presenting the likeness of a huge cauliflower. *Pari passu* with the development of this excrescence, was the decline in the general health of the patient. All the symptoms of a well marked cancer soon fully disclosed themselves, and at the present moment death is hourly expected. The tumour has now nearly attained the dimensions of the original affection, and may be considered a good specimen of encephaloid or medullary fungus.

It may be fairly concluded that the first tumour belonged to a class of which some examples are given by Müller, Stanley, and others, under the various names of ossefying fungous growth, malignant osseous tumour, fibrous osteo-sarcoma, &c., and of which a very perfect description may be found in Mr. Paget's recent work on Surgical Pathology, under the designation of osteoid cancer. A malignant growth, combining both osseous and medullary matter, usually developed in attachment to some part of the skeleton, but occasionally, as in the present instance, having connection with the softer tissues only. Like the common form of medullary cancer, it may after slight progress remain passive for several years, when suddenly it may attain excessive bulk, its progress exceeding in rapidity the common forms of cancer. Like encephaloid disease, it exhibits a tendency to attack both the young as well as the old; rather more than a fourth of the cases occurring in those under twenty years of age, and in the majority between the ages of 20 and 30 years. The character of tumour reproduced after operation has frequently occurred in the case under consideration, a fair specimen of true encephaloid disease without osseous combination. The diagnosis made in this instance, before the operation, of a non-malignant growth, was fully justified by the scanty data gleaned from what could be learned of the patient's antecedent history.

Had it however been recognised from the beginning as true cancer,

the statistics with reference to this particular form of the complaint are such as would bear out the propriety of an operation as a possible means of prolonging life. Of eleven cases given by Mr. Paget, four who allowed the disease to remain untouched died within six months of its appearance. Of seven who were operated on, two died in the course of the first year of its existence, one in the second, one in the third, one lived seven and a half, and the other twenty-five years.

ART. VII.—*Remarks on a few Points in the Treatment of Pneumonia.* By G. WILLIAM SEMPLE, M. D., of Hampton, Va.

In the April number for 1853, of the Virginia Medical and Surgical Journal, is published an excellent article on pneumonia, by Dr. Thos. Johnson. The author presents, in a succinct, but clear and accurate account of the symptoms, anatomical character, and physical signs of inflammation of the pulmonary parenchyma, a good portrait of that disease. The treatment proposed is well stated; I fully concur in all that is said of the efficacy of general blood-letting, the contra-stimulant effect of tartar emetic, and the antiphlogistic and other effects of calomel.

It has been my practice, after administering a full purgative dose of calomel in the commencement of an attack of pneumonia, to continue its exhibition during the first and second stages of the disease, whilst employing contra-stimulants and venesection, in such doses as to procure one or two free alvine evacuations in the course of every twenty-four hours, with the further view of lightening the office of the lungs, by the decarbonization of the blood through means of the bilious secretion thus produced, and also of placing the system in a condition for the more ready and rapid induction of the constitutional effects of mercury, should such a course be afterwards deemed necessary. On the speedy production of these effects in many urgent cases, the lives of patients frequently depend.

It has been my fortune to meet with not a few cases of violent pneumonia, involving the greater portion of one, and sometimes extending to both lungs, which, after resisting every effort to reduce them without the slightest abatement or reduction of the extent of

the inflammation, have been suddenly relieved by the spontaneous occurrence of a critical diuresis, when the condition of the patients seemed almost hopeless. This fact suggested to me the addition of a few drops of tincture of digitalis to each dose of the solution of tartar emetic, both with the view of inducing a critical diuresis and of aiding the sedative effect of the antimony; the successful results of this method have given me abundant reason to continue to employ it.

“I do not believe that such a thing as intermittent pneumonic inflammation ever exists,” but whatever debilitates, in a miasmatic region, favours the development of intermittent fever. Thus one who has had a copious epistaxis or other hæmorrhage, or has suffered from cholera morbus or an exhausting diarrhœa, goes out on a damp chilly day in autumn or winter and returns with an ague. The slight exposure enabling the latent poison of the intermittent to develop itself in a debilitated constitution, though it might never have done so whilst the patient continued unreduced. The debilitating treatment necessary to reduce a pneumonia in like manner favours the development of intermittent fever, and accordingly, in miasmatic regions, it often makes its appearance when the inflammation begins to decline. There are few physicians practicing in the tidewater country of this State who will not concur in these views; and scarcely one, who, on visiting some patient suffering from pneumonia, from the fifth to the eighth day, whom he had left on the day before in an improved condition, has not been told that on the preceding evening he had suddenly become much worse, had had a rise of fever, much thirst, increased frequency and difficulty in respiration, pain in the side, headache, pain in the loins and lower extremities, and perhaps some delirium; but that in the course of some hours a copious perspiration, attended by a free discharge of urine, had come on, since which he had again become better, though still not so well as on the day before. On examination he has found that dulness on percussion and bronchial respiration have extended, and that crepitation is heard over a greater extent of surface, though the pulse is softer, slower, and less frequent, and the skin is moist or even freely perspiring. When such a case occurs, if the physician do not recognise from the symptoms a paroxysm of intermittent fever, but concludes that from some unknown or accidental cause there has been only an increase of the pneumonic inflammation which is now perhaps in the course of being relieved by the occurrence of a favourable crisis, and prescribes accordingly; if the intermittent

now complicating the pneumonia be of the quotidian form, on visiting the patient the next day he will find that the same train of symptoms have recurred. But now the inflammation has perhaps extended so far that the patient, bathed in a copious perspiration, is gasping for breath. Woe to his patient, if he do not now recognise the intermittent before the third paroxysm. No treatment adapted only to the cure of pneumonia can possibly avail. Quinine and quinine only, in full doses, can arrest such paroxysms and leave room for a reduction of the inflammation by subsequent treatment.

Such attacks occurring in the course of pneumonia may assume the quotidian, tertian, double tertian, or any other type of intermittent fever. Whatever be the type, if the patient be closely attended, and the symptoms and physical signs attentively observed, it will be found from the latter, as might be anticipated, that the inflammation regularly and progressively extends during the cold (which is usually very short) and hot stage, and that a regular diminution of the inflammation succeeds, during the sweating stage, caused by the critical evacuations which then occur, though a larger portion of the lung or lungs is left impaired or spoiled after each successive paroxysm.

So common has the complication of pneumonia with intermittent fever become, that many of my medical acquaintances have adopted, as well as myself, the practice of exhibiting quinine in doses of from three to four grains, every third or fourth hour, as soon as the physical signs indicate a diminution of the extent of the inflammation. The expectoration usually improves, and the respiration becomes less laborious.

As intermittent fever frequently complicates pneumonia, so also does pneumonia often complicate vernal intermittent fever. In the spring of 1850, scarcely a case of intermittent fever occurred in this neighbourhood which was suffered to progress beyond the second paroxysm, that was not complicated by the occurrence of pneumonia. The arrest of the intermittent did not cure the pneumonia, but it required subsequent treatment, and sometimes even proved fatal.

CHRONICLE OF MEDICAL SCIENCE.

The translations and abstracts under this head, are made expressly for this Journal.

MATERIA MEDICA AND PHARMACY.

1. *Uva Ursi as an Ecbohc.*

E. G. Harris, M. D., of Fayette, Ala., calls attention (*Southern Med. and Surg. Journal*) to the advantages of uva ursi as a substitute for ergot, in producing uterine contractions. In five cases of insufficient uterine action from nervous exhaustion the administration of a decoction of uva ursi was followed by strong propulsive pains, and the speedy delivery of the foetus and placenta. There was little tonic contraction until after the delivery of the placenta, and then it was complete.

This agent is preferable to ergot because there is no danger in it, and because it does not produce that tonic contraction which is so painful to the mother and so hazardous to the life of the child.

2. *On the Solubility of the Biniodide of Mercury in Cod-liver Oil.*

The *Pharmaceutical Journal* contains an article by Mr. Barnes, of Knightsbridge, on the solubility of the biniodide of mercury. As this medicine is frequently given in conjunction with cod-liver oil, it is convenient to dissolve the biniodide in the oil. Mr. Barnes finds by experiment that solution is readily effected to the extent of half a grain to the ounce at ordinary temperatures, and that if the oil is heated it will permanently dissolve two grains of the salt. The biniodide of mercury dissolves with equal facility in melted lard and spermaceti ointment, in almond, olive and castor oils, and in chloroform and pyroxilic spirit.

3. *Iodide of Zinc.*

A solution of this salt has been recommended as an astringent in gonorrhœa, and Dr. Ross, of Scotland, found it to be a useful application in enlarged tonsils; it is only recently, however, that the drug has been employed internally. We read in the *Medical Times and Gazette*, of November 12th, that during the last six months, Dr Barlow, of Guy's Hospital, has made an extended series of trials of its curative effects. It has been chiefly prescribed in chorea, struma,

cachexia, and some forms of hysteria. Dr. Barlow considers it indicated in cases in which zinc alone is too irritating, or in which it is desirable to have the effects of both ingredients.

Iodide of zinc may be prepared by digesting an excess of zinc with iodine diffused with water; upon evaporation, a deliquescent, very soluble saline mass, is obtained. Or 20 parts of zinc and 170 of iodine may be heated in a matrass, and the iodide of zinc can be sublimed in the form of white needles. Dr. A. T. Thomson proposes a *syrup* of it to protect it from change, made on the same plan as the syrup of the iodide of iron, and it is this preparation, we believe, which is employed by Dr. Barlow.

4. *Thlaspi Bursa Pastoris* in *Hæmorrhage*.

Several of our contemporaries have copied an eulogy from the *Presse Médicale Belge* (through the ever convenient medium of the London Medical Gazette, of course,) upon the hæmatinic virtues of the plant whose resounding title graces the caption of this article.

Dr. Hannon, in the paper alluded to, observes that the cruciferae arrange themselves into two groups, according to their therapeutical constituents. Those which contain a sharp essential oil, and are therefore useful as external irritants, as mustard, etc.; and those which abound in bitter and astringent matter, and therefore promote digestion and enrich the blood. The latter class is a large one, embracing among other genera the various cresses which are either indigenous or introduced in America, and which have always been celebrated for their anti-scorbutic powers.

Shepherd's Purse, *Thlaspi*, or more properly *Capsella bursa pastoris*, is a common weed in all parts of the United States, growing everywhere in fields or on roadsides. Dr. Porcher, of Charleston, long ago called attention to its utility in hæmaturia.*

Dr. Hannon goes on to remark that the Shepherd's Purse was used in the earliest periods, being recommended by Dioscorides in hæmoptysis. This is incorrect, for the *thlaspi verum Dioscoridis* is the *lepidium perfoliatum*.—Lin. Sp. Pl. 897.

Dr. Hannon has found the extractum thlaspi, prepared by evaporating the fresh expressed juice to a proper consistence, in doses of one

* See Dr. A. CLAPP. *Report on Medical Botany*. Trans. Am. Med. Ass. Vol. v., p. 739. Our Philadelphia brethren are not prone to notice the recommendations of Southern physicians until they find them reiterated by foreigners. They ignore the researches of the accomplished medical botanist of South Carolina, but hasten to reproduce the paper of Dr. Hannon, although that learned Dutchman has not mentioned a single novelty that was true or a single fact that was new. A short time ago we published a curious instance of *poisoning by atropia applied to the conjunctiva*; the editors of the Phila. Med. Examiner waited until the article was pirated by the Dublin Medical Press, and then copied it, crediting it to the Irish Journal.—(See *Med. Examiner*, Vol. ix., p. 790.—[Ed.]

to two drachms daily, an excellent remedy in passive hæmorrhages, or in those diseases in which the fibrin of the blood appears to be diminished. It requires, however, a considerable time to exhibit its effects, and must be aided by diet and fresh air.*

5. *Ethereal Solution of Iodine.*

In a review of the hospital therapeutics of London, the *Med. Times and Gazette*, of November 12th, refers to a number of cases in which the ethereal solution of iodine has been used as a substitute for the alcoholic tincture, as an external application. Both from its higher degree of concentration and its more rapid evaporation, the ethereal solution is a much more powerful counter-irritant than the spirituous one. It has been employed with great advantage in several cases of inflamed joints, and in one instance, in which respiration was impeded by a large bronchocele, so that it was feared that tracheotomy would become necessary, after the common solutions of iodine, conjoined with its internal use, had failed to procure any mitigation in the symptoms, the application of the ethereal solution produced perceptible softening of the tumour, and the patient was enabled to breathe with comfort.

6. *Nickels' Elastic Plaster.*

At the meeting of the London Pharmaceutical Society in October, (see *Pharm. Jour.* xiii., 213,) Mr. Benjamin Nickels exhibited a new kind of plaster, which is peculiar in having a woven fabric, similar to that of stockings, for its basis, upon which the plaster, which may be of various kinds, is spread. This plaster adapts itself to irregular surfaces, and does not prevent muscular contraction or impede the circulation.—*Am. Jour. of Pharmacy.* Jan. 1854.

MEDICAL PATHOLOGY AND THERAPEUTICS.

7. *General Emphysema in Children.* By Dr. ROGER.

On seven different occasions, I have seen children, who, without any appreciable external cause, without any apparent surgical lesion, without having made any violent muscular effort,† and almost always during the

* For a botanical description of this plant, see *Wood's Class-book*, p. 161.

† M. Velpeau has presented to the Academy of Medicine, in the name of M. Vitali, a case of general emphysema, supervening in a boy while he was struggling to disengage himself from the arms of a play-fellow.—(*Arch. gen. de med.*, t. xxi., p. 372.)

course of some affection of the chest, presented suddenly the following symptoms: A tumour appeared at the lower lateral or anterior part of the neck, without any discolouration of the skin, spreading but not disappearing under the pressure of the hand, and giving an evident sensation of crepitation. This tumour, or rather this prominence, at first less than an inch in diameter, extends whenever the child cries or makes large respiratory movements; it gains the face, puffing up the cellular tissue and completely altering the physiognomy, and, descending towards the arms, thorax and abdomen, it involves the whole surface unless its progress is interrupted by death.

The pathognomonic crepitation tells us at once the nature of the affection. There is evidently emphysema of the areolar tissue, which, originating in some thoracic lesion, has progressed by continuity and contiguity in every direction.

While this infiltration of air is going on, grave functional disorders make their appearance. The respiration, already accelerated by the primary disease, becomes yet more rapid; the pulse becomes extremely frequent and small, and in a few hours, or one or two days at the utmost, the child succumbs to asphyxia, complicated, perhaps, with coma and cyanosis, its body disfigured and monstrously distended.

What was the *cause* of this general emphysema in these seven cases? Is it possible to admit a spontaneous gaseous exhalation, a true secretion? or shall we rather suppose that the air-passages were opened at some point and placed in communication with the peripheral areolar tissue? Without denying absolutely the possibility of the development of gas in living parts,* I believe that the emphysema which occurred in these cases is much more naturally explained by supposing some solution of continuity in the air-passages.

This explanation is confirmed by analogy. Emphysema occurs in childhood as well as at other periods of life, from surgical injuries involving the organs of respiration; it is not rare in difficult labours in which the patients strain violently; it has been observed in adults, in cases of rupture of sub-pleural pulmonary emphysema,† or of opening of a tubercular cavity at the apex of the lung into the cellular tissue

* The development of gas during life is not rare, says Vogel, (*Encyc. anatom.*, t. ix., *Path. anat.*, Am. ed., p. 38); it takes place in putrid fevers, in typhus, and gangrene. It is commonly evolved from the animal fluids, especially from the blood, when, before undergoing any chemical decomposition, it is arrested in different parts of the body, and its purification by respiration and secretion is thus impeded; or, when certain secretions, as the bile and urine, are checked and their constituents remain in the blood. *Gaseous products are then developed, which collect in the parenchyma of organs, and in the cellular tissue, constituting emphysema.* Authors have also spoken of spontaneous gaseous exhalation after the bite of the rattle-snake; but they do not allude to the infiltration of this gas, (except, perhaps, in the cases of gangrene observed by M. Sigaud; see his work on the *Diseases of Brazil.*)

† Archives generales. 1843. T. i., p. 473.

of the inferior portion of the neck. Dr. Boddand, of Gand, has reported* the case of a young girl of 16, who died from general emphysema, in which was discovered "in the right ventricle of the larynx, a little below the vocal chord, a small round ulcer, perforated in its centre," through which the air had entered the cellular tissue. Dr. Burgraëve has even cited an example of general emphysema consequent upon softening of the stomach with sub-peritoneal rupture of that viscus.

It was in children presenting analogous pathological conditions, that I observed the development of general emphysema. The reader may judge by the following cases, which I will sum up briefly :

CASE I.—B——, a little girl of two years, had laboured under double pneumonia for several days. One morning I noticed a swelling of the lower part of the cheek with the characteristic crepitus. The emphysema extended to the neck and upper part of the chest, and death occurred in less than forty-eight hours. The application of dry cups over the emphysematous parts gave no relief.

CASE II.—A boy of three years, affected with a pneumonia following whooping-cough. Emphysema of the neck, thorax, face and abdomen. Death two days afterwards.

CASE III.—A girl of five years, at Villette, symptoms of broncho-pneumonia. The face and neck were emphysematous when I saw her; high fever and dyspnoea. Death was impending.

CASE IV.—A boy of four years, of robust frame. Bronchitis; pleurisy of the left side; paroxysms of whooping-cough without sibilus. After three or four days, emphysema was discovered one morning. It occupied the face and neck, subsequently the thorax. M. Roux was called in consultation and proposed punctures, which were not practiced.

CASE V.—An infant daughter of Mad. L——, at Gonesse: double broncho-pneumonia. Emphysema, mistaken for anasarca, had extended to the abdomen. I was called in consultation, and arrived when the child was moribund.

CASE VI.—A little girl of one year, suffering from impetiginous eczema of the scalp, with profuse sero-purulent discharge. On the third day a tumefaction appeared altogether analogous to that which characterizes *mumps*. High fever came on, and vomiting and a greenish diarrhoea; subsequently there were some convulsive movements, and then emphysema appeared upon the neck and extended to the face and thorax. Death occurred in two days, there having been no diminution in the sero-purulent discharge.

CASE VII.—Quite recently I was called in consultation by Dr. Ozanam to a child of five years, who had been attacked successively by measles and broncho-pneumonia. Dyspnoea and extreme frequency of pulse had supervened, and, at the same time, a superficial emphysema, which was at first circumscribed, but which extended gradually over

**Gazette Medicale de Paris*. T. viii., p. 698.

the trunk as far as the navel. The pneumonia had been treated by kermes mineral, calomel, aconite, and blisters. I advised numerous punctures, and Dr. Ozanam accordingly inserted a fine trocar a great number of times. This treatment was fortunately successful, and an altogether exceptional cure was obtained. Dr. Ozanam will soon publish the details of this case, which, we believe, is unique.

To the foregoing cases we would add :

1. Three or four similar observations which M. Guersent encountered in his long career, but in which no autopsy was made.

2. A case which is somewhat analagous to those which precede. It relates to a child on whom M. Guersent (the younger) practiced tracheotomy to prevent asphyxia from croup. The air in passing through the opening made in the trachea infiltrated itself into the cellular tissue of the edges of the wound, and, notwithstanding methodical compression, it gained the face and thorax and thence occupied the whole body. The child died in three days.

3. A case published in *L'Union Medicale* (Feb. 8th, 1853) by M. Sandret of Besançon. In a child affected with hydrophobia, a spontaneous emphysema appeared on the last day of life, and pervaded the whole surface.

Upon examining the facts which I have briefly recapitulated, it will be seen that in every case the patients were affected with some acute disease of the respiratory organs, just as Natalis Guillot observed in the cases which he has reported. In all, the characteristic sub-cutaneous crepitation was first manifested either in the course or in the immediate vicinity of the organs of respiration.

Should we not conclude from these facts, and from the foregoing considerations, that in these young subjects some laceration of the mucous membrane of the trachea, or some rupture of the pulmonary cells and corresponding pleura occurred during a fit of crying or coughing, and that the air passing through this orifice gradually permeated the cellular tissue of the whole body. Such must have been the mechanism of the case of general emphysema which I met in my private practice, although I was not allowed to make an autopsy by which this assertion might be verified.

M. Guillot, more fortunate than I, has proved this fact in the most positive manner by his remarkable researches.

The *prognosis* of general emphysema is extremely grave. With one exception, every case I have seen has rapidly terminated in death. Dr. Ozanam's case proves, however, that death is not inevitable, and that the lesion is not altogether hopeless.

The dilatations of sub-pleural emphysema, when they burst, which is a most rare occurrence, are perforated by an exceedingly minute orifice, as M. Guillot has demonstrated; it is not impossible, therefore, that occlusion may take place almost immediately by means of adhesive inflammation. The perforation once obliterated (as happens in pneumo-thorax sometimes), the air infiltrated into the cellular tissue may be absorbed. What we observe in traumatic emphysema of the

walls of the thorax, proves that absorption is not very difficult under such circumstances.

As to the treatment of general emphysema, I believe that absorption of the infiltrated air may be promoted by resolvent applications; but it is first necessary to combat the immediate effects of the laceration of the lung, that is to say the progressive permeation of the cellular tissue. Calmatives, opiates, other narcotics, and digitalis, diminish the frequency of the respiration, and consequently the chances of generalization of the emphysema. The little patients will at least be comforted, and the fatal termination retarded; and is not impossible that by gaining this delay adhesive inflammation will have time to obliterate the perforation.

I believe, however, that it is perfectly justifiable to evacuate the air by slight incisions, or punctures with a fine trocar, without waiting for an occlusion of which there is only a bare possibility, or for a re-absorption which is a very tedious process. It will be seen (Case VII) that this course was adopted in the only instance in which a cure has been effected.

7. Case of Polydipsia. By M. CHARLES BERNARD.

[The following case of a very rare disease is interesting on account of the new treatment adopted in it, and also in a physiological point of view. Polydipsia, and its natural consequence—polyguria, presents a difficult problem to the physiologists of the day who pretend to explain everything.]

CASE. Houdet, a tailor, aged 37, born at Orleans, but a resident of Paris for the last eight years, entered the S. Marguerite Hospital, Ward S. Augustine, 53, on the 18th of August 1853.

Notwithstanding a substantial regimen, this man has almost always been in bad health, and, during the last ten years, has suffered from several serious attacks of illness; ten years ago he had pneumonia of the left lung, and a few years afterwards typhoid fever, which lasted five months and seriously impaired his intellectual faculties.

The present disease commenced in August 1851, by general debility, vertigoes, feebleness of vision, and disorder of the kidneys. The urine became more abundant and clearer. The patient suffered from hunger and thirst, and in three weeks was compelled to give up work on account of indistinctness of vision. He entered *la Pitié*, under the care of Dr. Nonat, and remained three months under a tonic treatment, with ferruginous preparations, etc. He passed fourteen quarts of limpid urine when he entered; he passed only six quarts when he left the hospital. Three days afterwards, Houdet took cold, his disorder of the kidneys and abundant excretion of urine returned, and he entered the service of M. Becquerel, who kept him four months, at the end of which period his daily quantity of urine was only four or five quarts, and his vision was improved.

Houdet remained fifteen months at home, nearly in the same state, taking iron, eating animal food, and able to follow his trade. Towards

the end of last August, general debility, feebleness of vision, renal disorder, and stomachic pains and considerable emaciation again supervened, and the patient determined to enter an hospital a third time; he passed at this time about seventeen quarts of urine. Since his admission he has been treated for a month by the salt of Prunelle.

I saw Houdet on the 20th of September in the following condition: There was relatively great emaciation, though not absolutely, for the patient still weighed 115 pounds. All of the senses were altered and enfeebled. Vision was feeble and confused, although the pupils were normal. Tactile sensibility was slightly diminished over the whole surface of the body, and very considerably on the left side. Olfaction was impaired; there was continual ringing in the ears, and almost constant headache.

There was intense and incessant thirst; the patient drank three gallons a day, and often took a quart of water at a draught. There was constant desire to urinate; the patient's sleep was greatly interrupted from this cause. The appetite was enormous; Houdet ate six pounds of bread daily, whereas, before he was taken sick, six pounds a week sufficed for him. There was alternate diarrhoea and constipation. The abdomen was distended, and resonant on percussion, particularly in the epigastric region, where the distention appeared to depend upon enlargement of the stomach. The pulse was at 68.

There were nocturnal sweats and slight cough, and yet nothing abnormal could be detected in the chest by auscultation or percussion. The urine was clear, limpid and insipid as pure water. Its specific gravity was only 1000 and the fraction of a degree; treated by various chemical agents, it gave no reaction. There was pain in the lumbar region, on either side of the vertebral column, which was increased by pressure.

After persevering in a tonic and ferruginous course of treatment for some time, M. Legendre commenced, on the 5th October, the daily administration of calomel in doses of two grains.

This treatment began to show its effects in a few days. The thirst became less insatiable; the mouth less dry; the patient passed two quarts less urine daily, and the number of alvine evacuations increased. But diarrhoea soon came on, salivation and all the signs of mercurial intoxication set in, and it became necessary to suspend the calomel on the 19th of October, a fortnight from the commencement of its administration. Moreover, for the last eight or ten days the patient had gained nothing. The quantity of drink and urine was the same as on the 12th, and the urine was of the same chemical and physical character. At this date (Nov. 20th) the patient appears to be in the same condition, with the exception of the mercurial salivation, that he was a month ago.

The fatality of polydipsia is well known. Death is the rule, in this disease, and recovery the exception. In 27 cases collected by M. Lacombe,* only one had a favourable termination. It is useless to re-

* *Thèses de Paris.* 1841.

capitulate the various modes of treatment which have been recommended. A new medication, advised by Dr. Fleury,* is supported by a case of great amelioration, if not of positive recovery.

This case relates to a maiden lady of 34 years, who drank upwards of four gallons of liquid daily. At the end of twelve days of treatment by minute doses of calomel, she left the hospital, drinking only three quarts. M. Legendre, struck by this result and by the theoretical considerations which had induced Dr. Fleury to adopt this line of treatment, had recourse to it in the case of Houdet, with whom all other remedies had failed. In a few days, however, the toxic effects of mercury made it necessary to abandon the remedy. The medicine, moreover, had soon ceased to act; it produced only a slight amelioration, which could be attributed to other causes. It was right to recall the fortunate essay of Dr. Fleury, and to contrast it with that of M. Legendre, but nothing can be deduced from these incomplete and contradictory cases. There must be new researches, therefore, in order that we may form a legitimate opinion in regard to the therapeutic value of calomel in polydipsia.

8. *On the Treatment of Inflammations by Impermeable Coverings.*
By M. ROBERT LATOUR.

M. Latour's method is based upon that interesting discovery of M. Fourcault, that, if the skin of a warm-blooded animal is removed from the action of atmospheric air by an impermeable coating, the temperature of the animal immediately falls, and continues to descend until the animal dies. The immediate action of the air upon the skin, appears then to be essential to the development of animal heat. Local elevation of temperature being an initial phenomenon of inflammation, M. Latour imagined that if inflamed parts were shielded from the contact of the air the morbid process would be checked, and experience has confirmed this hypothesis. The impermeable coat employed by M. Latour is the terebinthinate collodion, prepared as follows: Collodion, ʒj.; Venice turpentine, ʒss.; Castor oil, gtt. x. A thick coat should be laid on, and the limits of the inflammation should be transgressed in every direction. The diseases in which the author has employed this mode of treatment are numerous: erysipelas, zona, traumatic lesions, burns, acute articular rheumatism, peritonitis, ovaritis, pleurisy, etc. He reports eighty-eight cases in which the treatment was successful. Since Dr. Robert Latour has made known these results, other physicians have confirmed the utility of impermeable coverings. Thus Dr. Blache has seen an inflammation of the mamma rapidly subdued by coatings of collodion. Experience seems to corroborate the efficacy of this mode of treatment; but is it indeed the diminution of animal heat to which the good effects of impermeable coverings are to be attributed? This is doubtful; the explanation, however, is unimportant if the therapeutical efficacy of the remedy is real. *Répertoire de Pharmacie.*

* *Archives générales de Médecine.* T. xvii. 1848.

We have recently read a work by Dr. Latour on this subject,* in which the author gives the results of twenty years study of the nature and causes of inflammation. It is rather an hackneyed topic. All works on pathology commence by long dissertations upon inflammation and the mode of its production, and each author, by giving a different definition, seems to postpone indefinitely the solution of the problem. Dr. Latour declares, that inflammation is the *totality of several connected physical phenomena, of which the initial element is nothing else than the local ascension of animal heat*. Thus, in a given point of the economy, the animal temperature being in excess, the blood is dilated at once, whence the vessels which it traverses are dilated, and its motion is accelerated. A second column of blood succeeds the first, but each column is greater than the last, and augments the calibre of the capillaries, until the latter, resisting by their cohesive attraction the expansive force of caloric, are maintained at a new calibre by two powers in equilibrium.

This dogma, to use the author's mystical expression, cannot be true, as he admits, unless every part of the economy contributes to the great function of calorification. But, if the combustion which occurs during respiration is a great source of caloric, it is not the only one, and Dr. Latour believes that calorification must depend chiefly upon special ever-active agents possessed only by warm-blooded animals. He considers the ganglionic nerves these agents. They accompany arterial blood, as faithful satellites, wherever it goes, and stop where it terminates, leaving the lymphatics and veins to themselves.

This action of the ganglionic nerves the author is compelled to assume, for it cannot be demonstrated. However, leaving explanations aside, the author thinks it certain that animal heat, however generated, guarantees and regulates the circulation. This conclusion is deduced from numerous experiments, into the details of which we cannot enter, and which do not always appear to us as conclusive as the author regards them.

Dr. Latour thinks that what any one else would call inflammation is nothing more than simple congestion, unless heat is its cause, and that in cold-blooded animals that this is always the result. Dr. Latour considers this heat the cause and not the effect of inflammation. Let us grant it. But what is the cause of the elevation of temperature? By what mechanism is it produced? Because we must certainly have the proofs of the new theory. A patient's foot, for example, is the seat of arthritis, it is hot and congested, inflamed in fact; what is the cause, what the mechanism of this exaggerated calorification? "Surely, replies the author, I need feel no embarrassment in confessing that science has not elucidated this point; the reality of animal heat suffices for the requirements of my conception."

We reply that the reality of the heat is evident and contested by no one, but we should be glad to have the proofs that it is the cause and

* *De la Chaleur animale comme principe de l'inflammation, et de l'emploi des conduits imperméable comme application du dogme.* Paris. 1853.

not the effect of the inflammation. Unless this demonstration is given, we will not say that the theory is false, but only that it is not more likely to be true than others.

In the practical part of M. Latour's book, he reasons entirely from the fact mentioned at the commencement of this article. He concludes from M. Fourcault's experiment that the action of atmospheric air upon the skin is one of the absolute conditions of calorification, and hence that by shielding inflamed parts from atmospheric contact, the morbid process can always be extinguished.

M. Latour adduces many facts in support of the efficacy of the treatment he recommends. Some are so astonishing, as for example a case of peritonitis from rupture of an ovarian cyst, that we shall reserve our opinion of them. The effects of the new method upon superficial inflammations appears to have been most favourable. We have often seen facial erysipelas treated by M. Briquet, of *la Charité*, by coatings of collodion, with the best results, and have, ourselves, recently treated a bad case of this disease by this method; it terminated speedily and favourably. We attributed the advantageous effects of the application to the powerful compression exercised by the gun-cotton as its etherial menstruum evaporated. However advantageous in local and superficial inflammations, impermeable coverings may be, it is powerless in deep-seated complications, as in meningitis, for example, supervening upon erysipelas of the face. Therefore we must avoid believing with Dr. Latour, that "hereafter the place of erysipelas in human necrology will be vacant."

Dr. Latour says that zona, or "shingles," as it is termed in this part of the country, is absorbed in a few hours by the use of impermeable coatings. The treatment is not new, for dermatologists unite in advising the dessication of the pustules in this affection, and their isolation by means of flour or starch, rejecting energetically the cataplasms and emollient applications which were once employed.

As to the pleurisies, etc., cured by collodion, after blood-letting, leeches, and other remedies usual under such circumstances, had failed, we are skeptical enough to believe that these remedies, employed before the collodion, should claim some share in the cure.

Dr. Latour is an earnest and conscientious writer, but we fear that he has been led into some extravagances by a desire to establish a theory.

9. *Upon the Diagnosis and Treatment of Croup.* By Dr. HIRTZ.

Before the labours of modern physicians had assigned to croup its true anatomical characteristics and nosological rank; when, yet confounded among the numerous family of laryngites, it formed a part of their history, it would have been very easy, and consequently quite uninteresting, to furnish cases of cure. Every physician then counted his fortunate cases by the dozen, and every family could cite cases of children attacked by croup and cured at least ten times.

Now, on the contrary, that the name of true croup is only applicable to pseudo-membranous laryngitis, and that the progress of science has

invested its diagnosis with such precision that it is impossible for an experienced physician to mistake it from the very commencement, croup has become a comparatively rare disease, and its cure an exception occurring at long intervals.

On the other hand, the scientific views of the progress and diagnosis of true croup are not yet sufficiently vulgarized among physicians as to render confusion impossible. It still too often happens, that it is mistaken in its insidious approach, and lulls the family and physician into a false security, and then shows itself with all its terrors in a few hours afterwards. In other cases, stridulous laryngitis is taken for true croup, and draws down upon the unhappy child the whole superfluous arsenal of therapeutics, and excites the unnecessary fears of parents.

Dr. Hirtz, after these just reflections, reports two cases of pseudo-membranous croup in two sisters, which terminated in recovery. We shall reproduce only the last.

CASE. Marie R——, aged 4 years, of good constitution but temporarily enfeebled by bilious diarrhœa, has been unwell for several days. Every morning she feels fatigued, complains of pain in deglutition; she is often hoarse, but does not cough. The 25th, (the same day on which her younger sister was suffering from croup at its greatest intensity,) Marie appeared more unwell; she was dispirited and prostrated, more hoarse, and feverish. Dr. Hirtz was seized with a sinister presentiment. Notwithstanding the cries of the child, he examined the throat, and discovered that the soft palate, uvula, and pharynx were red and inflamed, and that the tonsils were already covered by a yellowish-white pseudo-membranous exsudation, which was quite thick, and occupied almost the whole of the surface of each tonsil. There were present, in fact, all the signs of croupal angina. Dr. Hirtz immediately prepared to perform cauterization, and effected this operation completely and satisfactorily in spite of the child's obstinate resistance.

The following night was tranquil; no unfavourable symptom supervened, and on the next morning, Dr. Hirtz hoped that the disease was aborted. This hope was realized; an abundant mucous secretion was observed in the fauces, deglutition became easy, and the pseudo-membranes, though they continued visible for two days, finally disappeared in copious discharges of mucous. The diphtheritis was jugulated.

This case proves how false and dangerous are the ideas which still prevail in society, and even among some physicians, in regard to the incipient symptoms of croup. It is stridulous angina that awakens all the apprehensions of parents; it is false croup which calls forth all the solicitude of physicians; it is against this that every mother keeps that precious bottle of hive-syrup which never leaves her.

If there happens to be membranous croup, true croup, on the contrary, there is every chance that the physician is not called until the second or third day, that is to say, when grave symptoms announce that the disease has extended to the larynx.

In these two cases, it required, in the first, not only all the vigilance, but all the foresight of the maternal heart to awake suspicion, and in the second, the existence of croup in the family to cause that disease to be thought of while it was yet time. It will be noticed that the

children were running about and playing when the pseudo-membrane was already formed at the entrance of the pharynx.

We cannot therefore too often caution mothers against that dangerous error, which, by mistaking false croup for true croup, causes children to be tormented by violent and superfluous physic, and, which is worse, leads to deception in regard to one of the cruelest and most insidious of diseases.

It is desirable, I say, that it should be generally known, that when a child in full health is suddenly seized, during sleep, with cough and hoarseness, with oppressed breathing and rattling, there is no need to be frightened and to give powerful medicine; for this is not true croup. That if, on the contrary, after a febrile attack, a child has a cold in the head, sore-throat, difficulty of deglutition, and slight hoarseness, the fauces should be examined, or, better still, a physician summoned at once, for nineteen times in twenty true croup commences in this way.

I say nineteen times in twenty, for it is not to be forgotten that croup sometimes commences in the larynx and even in the bronchi, appearing afterwards in the pharynx. I reported a case of this sort twelve years ago; M. Nonat has seen another, and M. Barth a third. But it was on account of their rarity that these facts were published.

When croup attacks one child of a family, the remaining children should be watched with redoubled vigilance; for, whether it be contagious or endemic, the fact is certain that the disease often attacks many members of the same family.

A few words on the treatment of croup. The distinguished physicians who, at the commencement of this century, threw so much light on the nature of croup, attended too exclusively, perhaps, to the mechanical action of the false membrane as a cause of asphyxia. Hence the paramount indication of expelling this foreign body at all hazards, and consequently the use of emetic, which word has become almost the correlative of the word croup. In society especially, this mode of treatment has assumed an exclusive character, and persons believe themselves sufficiently protected if the arsenal of domestic medicines contains tartar emetic.

This doctrine applied in an absolute manner, is false in theory, and dangerous in practice; it is false in theory, because asphyxia may result from many causes besides obstruction of the glottis; it may be explained either by the extension of inflammation to the sub-mucous and muscular tissues of the larynx, producing paralysis of the obturator muscles of the glottis, or by the propagation of diphtheritis quite into the bronchi. This is why we often see children die after the expulsion of false membrane, and others recover without this being eliminated. This is why we often observe at the autopsy of children who have died in the last period of croupal asphyxia, that the laryngeal orifice is sufficiently open for the purposes of respiration. And lastly, this is why tracheotomy is so often unavailing. This doctrine is dangerous in practice, because the reiterated and inopportune employment of emetics is not only useless, but often productive of dangerous disorders.

How can tartar emetic remove a membrane which is scarcely formed and adheres firmly to a surface upon which all normal secretion is checked by a specific inflammation? If it is persevered in, the efforts caused by it increase the cerebral and pulmonary congestion; the stomach is finally worn out and no longer responds to the remedy. The physician returns to the charge with sulphates of copper or zinc, and the child sometimes dies, as Dr. Boeckel has observed, from the intoxication produced by these poisons, rather than by croupal asphyxia. Tartarized antimony given judiciously, however, is a grand resource; but it must be employed with method, and, above all, opportunely, the favourable moment being calmly awaited. This moment occurs when the specific inflammation, modified or checked by other remedies, again permits some secretion of mucus, which separates and detaches the false membrane.

Dr. Hirtz believes that the most rational method of treatment consists in modifying, in the first place, the specific inflammation by cauterization; and in combatting it by calomel combined with a few leeches. When this result is obtained, we should act on the mucous secretion by kermes mineral and the golden sulphuret of antimony, and lastly, upon the expectoration by two agents which then become invaluable; the first is tartar emetic, administered with discrimination and at proper intervals, and the second is muriate of ammonia (formula of Richter), a true incisive, according to the old nomenclature, and a powerful expectorant when administered perseveringly.—*Revue Médico-Chirurgicale de M. Malgaigne from Gaz. Méd. de Strasbourg.*

OPHTHALMOLOGY.

10. *Liquid Cataract removed by Aspiration.* By Dr. DESMARTIS, of Bordeaux.

[We condense the history of the following case from the details given in the *Revue Thérapeutique du Midi*. Dr. Saurel, editor of that journal, informs us that the statements of M. Desmartis are perfectly reliable.]

An old man of 70 years came to Bordeaux to be operated upon for cataract. Eleven years before he first experienced troubled vision, and was annoyed for some months by *muscæ volitantes*. At this period he lost the right eye by the rebound of a limb of a tree. He still suffered in this eye, when M. Desmartis saw him; the right pupil was deformed, there was adhesion of the uvea to the capsule (*synechia posterior*), cataract, and deformity of the anterior chamber. The patient had been totally blind for ten years, a cataract having formed in the left eye very rapidly after the loss of the right.

Dr. Desmartis ordered one or two antacid purgatives preparatory to the operation, which was postponed four days.

On the day fixed for the operation, the surgeon found that the left iris was insensible to belladonna, which confirmed his apprehension that paralysis of the eye existed. He determined to operate by depression. The needle, after penetrating the sclerotic, pierced the capsule and evidently entered a fluid medium. Desmartis was embarrassed. It was easy to lacerate the capsule and wait for absorption, but the patient was old and very feeble, absorption would be slow, and secondary cataract would occur in all likelihood. Under these circumstances, an idea suddenly flashed across the surgeon's mind. He took a fine glass tube, and having heated it, drew it out until its extremity was scarcely larger than a cataract needle. This extempore instrument was introduced through the puncture made by the needle, and when it reached the lens, the operator applied his mouth to the tube, and sucked out the crystalline liquid. The pupil was now clear, with the exception of a few capsular shreds, and the patient exclaimed that he saw a little. Dr. Desmartis aspired again, and had the satisfaction of removing his instrument with the shreds of capsule half engaged in the extremity of the tube.

Cold compresses were applied upon the eye, and the after treatment was carefully conducted; unfortunately, however, the disease was complicated with amaurosis, and in two weeks the patient went home, with some vision, it is true, but seeing all objects through a dense mist. He was able to walk about without a guide.

Dr. Desmartis after detailing this remarkable history, defends himself from the charge of rashness in introducing such a fragile instrument into the eye. He believes that the principle on which he acted may be usefully applied, not only to the cure of fluid cataracts, but to the treatment of hydrophthalmia, hypopion, etc. He has had an instrument constructed by Charrière for this purpose, which consists of a hollow needle attached to a glass tube.

[M. Laugier some time since resuscitated the idea recorded by Rhases and Albucasis of the treatment of soft cataract by aspiration. His apparatus consisted of a small syringe attached to a hollow needle. It is sufficient to refer to the rarity of fluid cataract, and to the fact that when it exists it is often readily cured by laceration and absorption, to show the slight value of this method. Those who desire to read a discussion of the whole subject may do so in the work of *Tavignot, Traité clinique des maladies des yeux*, Paris, 1847, p. 470. For an admirable description of fluid cataract and the means of diagnosing it, see Mr. Dalrymple's work.]

11. *Operation for Cataract in a Patient aged eighty-eight.* By Dr. WILLIAMS.

At a meeting of the *Society for Medical Improvement*, Dr. Williams mentioned an operation for soft capsulo-lenticular cataract on one of the oldest citizens of Boston, a gentleman upwards of 88 years. Cataract had existed for twenty years in the left eye, and within a few

weeks another cataract had formed and vision was lost in the right eye also. The left eye was operated on. The lens did not offer sufficient resistance to allow of its depression, it was therefore broken up. No inflammation followed, and the fragments of the lens were rapidly dissolved. A second operation was performed two months after the first, for the removal of a small portion of the posterior capsule. Six days from this time, the patient read the finest print with the aid of glasses. The rapidity with which the lens was absorbed at an advanced age, and the perfect result, notwithstanding the long disuse of the retina, render this case interesting.—*Amer. Jour. of Med. Sciences.*

12. *Fluid Congenital Cataract.*

Dr. H. W. Williams, of Boston, reports (*Amer. Jour. Med. Sciences*) two operations on a boy of nine years, who had never enjoyed any vision. The cataracts were of very large size, so that when the pupil was largely dilated by atropia, no clear space existed between the circumference of the lens and the margin of the pupil. When the capsules were incised, their milky contents were at once discharged, not even a nucleus of hard lenticular substance could be discovered. The next day both pupils were clear. No inflammation occurred, and the boy was able to commence learning to distinguish objects by his eyes almost immediately.

PSYCHOLOGICAL MEDICINE.

13. *Case of Suicide by Voluntary Combustion.* Reported by Dr. BRICHETEAU.

M. P——, aged 36, having lost, shortly after his marriage, a wife whom he tenderly loved, was so deeply affected by this bereavement, that he fell into the profoundest melancholy. He believed that he saw the form of his beloved spouse amid the clouds, and that he heard her voice calling to him. These hallucinations were only momentary, and did not prevent M. P——, who was a magistrate, from fulfilling his public functions with exactness and decorum. He laboured much at night, and nerved himself for his lonely tasks by small quantities of wine, and by the use of smoking tobacco, in which he indulged to excess.

At last he enjoyed a long interval of repose and mental calm, and thought of marrying again; but some difficulties which he encountered in contracting a new connection rendered the memory of his first wife dearer to him; his visions returned; he subjected himself to practices of exaggerated devotion, and read ascetic books, which only increased his periodical aberrations of intellect.

At this time Dr. Madin, of Verdun, was requested to visit M. P——. The patient received him politely, but informed him that he had no need of his services, that he was the elect of the Lord, and that a lofty destiny was reserved for him. M. P—— then spoke in respectful but incoherent terms of women; he adored them all, young or old. He had a divine mission, he added, to burn bad books and other objects offensive to morality.

This incendiary mania gained upon the unfortunate magistrate, who on several occasions set fire to his house, while undertaking to purify it with a lighted torch. When these paroxysms of true insanity were over, M. P—— was the first to laugh at his own extravagances and appeared to have regained his reason entirely; his friends were thus lulled into a false security. Dr. Madin, however, noted a slight incoherency of ideas even in the patient's most lucid moments, and gave the strictest orders that he should never be left alone. His apprehensions were only too well founded.

The 11th of January 1836, at two in the morning, Dr. Madin was summoned to M. P——, who had voluntarily committed his body to the flames, in expiation of the sins with which he reproached himself. For this purpose, he had prepared a sort of funeral pyre in his kitchen; the smoke produced in the combustion of the fat of the poor lunatic had apprised his domestics of this tragic event.

He lay in the midst of a horrible smoke, which scarcely allowed him to breathe, calm and almost smiling. "Dear doctor, he said, I am going to rejoin my wife; I am worthy of her, now that I have expiated my horrible crimes at the stake. I have been two hours on the pile which God ordered me to construct; I have taken care to keep the fire burning by piling on faggots." The countenance of the patient, during this singular allocution, betrayed neither pain nor emotion of any sort.

Dr. Madin found that the lower extremities were consumed quite to the hips; the bones were calcined; the genital organs were carbonized, and the hands were reduced to deformed and blackened stumps. The remainder of the body was intact.

The patient had been enveloped in a sheet spread with cerate for about ten minutes, when his voice which had been so firm and resonant, became feeble of a sudden; the pulse failed; death was impending. Dr. Madin rapidly removed the dressings, and found that one of the popliteal arteries, corroded by the fire, had given rise to a mortal hæmorrhage.

The instrument of torture consisted of fifteen or twenty faggots, which the patient had artistically arranged in the fire-place of his kitchen. A great quantity of fat, mingled with blood, had flowed six or seven feet from the hearth.

This strange fact certainly merits a place in the annals of psychological medicine. M. Madin has only deferred its publication from respect for the feelings of relatives.—*Bulletin de l'Académie Impériale de Médecine*, October 31, 1853.

THERAPEUTICAL RECORD.

Anasarca.—Dr. William Wood, of East Windsor-Hill, Conn., warmly recommends (*Am. Jour. of Med. Sci.*, Jan. 1854,) the use of the infusion of Hair-cap Moss (*Polytrichum Juniperinum*) in diseases requiring diuresis. He reports numerous cases illustrative of its efficacy. The polytrichum is a cryptogamous plant, common in New England, which has never before been suspected of possessing medicinal properties. It may be administered in any quantity, never giving rise to unpleasant symptoms.

Erysipelas.—The tincture of the perchloride of iron, so highly recommended in this disease by Dr. Balfour, (*ante*, vol. i., p. 414,) has been extensively used in the London hospitals with excellent results. (*Med. Times and Gaz.*, Nov. 12th.) With regard to the local applications in this affection, it may be stated that a large or thick sheet of cotton wool appears to be superior in its protecting influence to all others. Lately, in several severe cases of erysipelas of the scalp, at St. Thomas' Hospital, Dr. Goolden smeared the affected parts with a thick coating of white paint. The patients did well, but the remedy is not an agreeable one.

Fever—Intermittent.—Dr. Peterfield Trent, of Richmond, Va., publishes (*Charleston Med. Journal*, January 1854) his experience in confirmation of the utility of the decoction of cotton-seed (*gossypium herbac.*) in the treatment of ague. Dr. T. reports five cases in which this remedy seemed to exert the most beneficial effects.

Gout—Chronic.—The ancient remedy of soda poultices for chronic gout seems to have fallen into unmerited disuse. We have lately seen numerous cases in which they apparently produced great benefit. One drachm of soda was mixed with a common bread poultice and applied hot over the affected joint every night.—*Med. Times and Gaz.*, Nov. 12th.

Gout.—M. Gaffard, of Aurillac, reports (*Revue Médicale*) that having been struck with the good effects derived from the use of "Lartigue's Pills" in this disease, he has attempted to discover their composition. After decomposing and recomposing this *quasi* secret remedy, M. Gaffard has prepared a formula which he has found useful, and which he hopes his medical brethren will use. It is as follows:

R. Extract of cevadilla, (*Sabadilla*,) (prepared with boiling alcohol,) ℥j.

True Aleppo scammony, }
Barbadoes aloes, } ℥v.

M. Ft. pil. 96. (*Lycopodium*.) Two pills every six hours.

Gout.—The acute pain of gouty inflammation may be quickly relieved, according to Dr. Goolden, (*Med. Times and Gaz.*, Nov. 12th,)

by the application of pure alcohol. Dr. G. has long employed this remedy in private practice, and always with the most pleasing effects. He believes that it acts by being absorbed, and not by mere evaporation. The mode of application is by a piece of saturated lint covered with oil silk.

Pneumonia.—Dr. Ames, of Montgomery, Ala., (*N. O. Med. and Surg. Jour.*, Jan. 1854,) regards blood-letting, mercury and antimony as often extremely deleterious in pneumonia as it occurs in Southern latitudes. He prefers to treat inflammations of the lung and phlegmasiæ generally by aconite, phosphorus and quinine. Phosphorus he considers a contra-stimulant and immediate sedative to the general circulation, and not a diffusible stimulant and aphrodisiac. He administers it in diluted alcohol in which it is sparingly soluble. We sincerely hope that the menstruum does not evaporate and allow the phosphorus to inflame in the stomach of the patients subjected to this novel medication.

Rheumatism—Chronic.—Dr. Bennett, of St. Thomas Hospital, has recently observed (*Med. Times and Gaz.*, Nov. 12th,) many cases illustrative of the good effects of iodine painting of joints affected with chronic rheumatism. This remedy, though so long known, is not as generally employed as it should be. It was a great favourite, we believe, with the late Dr. Pereira.

EDITORIAL AND MISCELLANEOUS.

We regret to hear that the “Stethoscope and Virginia Medical Gazette” has been purchased by the “journal committee” of the Medical Society, and is to be converted into the paid organ of that body, instead of remaining, as it has heretofore been, the independent representative of the whole profession.

This announcement, we are sure, will strike with as much surprise the late subscribers to the Stethoscope, as it has done ourselves. The editor, in his December number, (which, however, was not published until some time in January) positively stated that the negotiations between himself and the journal committee had failed, and that he hoped soon to greet his friends in the January number. He also assured his patrons that his journal was catholic and independent, and should remain so. Whatever may have caused this sudden change of determi-

nation on the part of our contemporary, we are sure that its supporters can never look on it hereafter as an independent journal, when they find that it is bought, paid for, and edited, by a committee of the Medical Society of Virginia.

It may not be uninteresting to our readers to know what this "journal committee" has done and left undone. It has not done what it was instructed to do by the twenty members of the Medical Society which met in Charlottesville; it has not brought out a journal on the 1st of January. We have been waiting with patience to witness the rise of this luminary, before which our lesser lights were to pale. We had prepared a smoked glass to gaze upon the brilliant orb with safety, but not one glimmer of its approach has yet been vouchsafed us. Yet the committee has done much. In the first place their financial editor, the originator of this scheme, is to draw out of the society's treasury a salary of \$800 to \$2000. Six editors are appointed and asked to perform impossibilities. Living in different portions of the State, they are expected to edit a Journal in Richmond, to procure articles, which are not to be published unless approved by a majority of them, to read exchanges, and make translations, and prepare a journal other than "a Ranking or a Brathwaite," and not only to do this without pay but to contribute their due proportion to the financial editor's salary. Three of the physicians elected to these honours, Drs. Thweatt, Cabell and Johnson have declined them. The remaining three, Drs. Lewis, Bolton and Marx, for all we know to the contrary, may retain them.

The next step of the committee was to purchase the Stethoscope, in the name of the Society, at a price which, from reliable information, we may set down at not less than \$800. When we add the printer's bill, which will not be less than \$1,500, if the committee intends to approach our Journal in size or appearance, we have the sum of at least \$3000 to come out of a treasury, the contents of which were at the last annual meeting \$47 less than nothing. We can very well account for the horror-stricken countenance (which has become perfectly *pathognomonic* of a member of the Medical Society) as he gazes on the large amount which he is expected to pay, in order to enable a few individuals to write themselves into public notice. Is the country member aware that this whole scheme is under the control of the executive committee of the society, whose quorum consists of *five*, so that *three* men living in the city of Richmond (a majority of the quorum of five) may have had it in their power to com-

mit the 300 members of the society to this heavy expenditure? The result will be that in a short time the whole of this complicated machinery will fall to the ground, and the Journal will gracefully slide into the hands of two or three individuals, leaving the society to replenish its bankrupt treasury and recruit its exhausted ranks as best it can.

As the senior medical editor in Virginia has thought proper to be accessory to the murder of his own offspring, and sold his birthright for a mess of pottage, *we* now ask the profession to give their support and the weight of their influence to us. We are much mistaken if they will allow themselves to be bargained for and transferred from one journal to another, without being consulted on the subject. *We are not and never will be* the organ of any society, whose quorum consists of twenty members, or of any medical school, or any other association of a small proportion of the medical men of the State anywhere. It would be a very comfortable thing to have our printer's bill paid for us, and our financial editor has a much more troublesome duty to perform than to draw a salary of from \$800 to \$2000; but we would accept neither at the sacrifice of our independence.

We intend to be the organ of the whole profession whether in or out of the society, whether belonging to the medical schools or not. We will defend their interests and argue their cause, and we will depend for our maintenance upon their voluntary contributions, and as we are daily receiving increased evidences of their determination to grant us their cordial approbation, we do not fear opposition, let it come from where it may.

Hydrophobia.

In a late number of the Boston Medical and Surgical Journal, we notice a recent case of hydrophobia reported by Dr. Hayward, with some very interesting accompanying remarks. We are very certain that many members of the profession still doubt whether there exists any such specific disease, but are inclined to look on such cases as have been so entitled, as nothing but simple traumatic tetanus.

That there are many points in common to the two diseases, we have no doubt, and we can agree with Dr. Hayward in having at times been very uncertain whether they could with propriety be separated. We have ourselves some experience in tetanus, though we have never seen a case of hydrophobia proper, but it is impossible to read the case reported by Dr. Hayward, taken in connection also with the cases of Dr.

Marcet in the medico-chirurgical transactions, and those given by Dr. Elliotson, Dr. A. T. Thompson, and the very interesting case reported by Mr. Godrich, of Brompton, in the London Medical Gazette for the year 1828; without seeing how very near together the two diseases run, and how difficult it would be to give any pathognomonic sign by which they could be distinguished from each other. Dr. Hayward, in the paper referred to, gives in connection with his hydrophobic case, one of tetanus which he met with about the same time, and we are thus enabled to draw a parallel between these very similar diseases; or as we think, more properly speaking, these similar irritative agencies affecting different portions of the spinal marrow.

The hydrophobic case of Dr. Hayward is briefly as follows. A healthy boy, aged 7 years, was bitten in two places by a dog; one wound was at the outer angle of the eye, the other in the corner of the mouth on the opposite side. His medical attendant, Dr. Wild, who saw him early, used suction with his lips for two hours to the wounds, and then freely cauterised them with nitrate of silver. The child seemed to get perfectly well, and continued so for a month. He was noticed, however, to be more sensitive to cold than usual. Just one month after the accident, he became restless and had some uneasiness about the stomach, and the next day, on attempting to drink some water, became agitated, and when it was again offered to him, was convulsed and cried out with great apparent terror. He also complained of some pain in the eye. Dr. Wild, sen. visited him in the evening and gave him extract of belladonna, but it was doubtful whether he swallowed any of it; at any rate he never swallowed afterwards.

During that day he moved constantly about, with his head inclined to one side, and was very sensitive to currents of cold air, quite irritable and disturbed by company, unable to swallow; respiration hurried, and mouth filled with frothy saliva.

The next day, Dr. Hayward saw him for the first time, and found him very restless, walking about the room, head drawn to one side, excited by company, though perfectly rational, and when asked what was the matter, said that he could not swallow. His respiration was very hurried, accompanied with very rapid utterance. On attempting to drink water he was strongly convulsed and cried out distressingly. Various efforts were made to get him to swallow, but without avail. It was raining at the time, but, unlike many of the cases reported, he was not affected by the pattering of the rain drops, though he evidently heard them. His throat was slightly red, and mouth filled with frothy saliva; pulse 120, small and feeble, and respiration 40 to the minute. On the following day partial hemiplegia took place, his articulation became indistinct. He still seemed to be in possession of his reason. His symptoms before death seemed to indicate effusion on the brain, and he died on the night of the third day.

In this interesting case, thus briefly stated, we notice that the *nerves of sensation* are first involved, as indicated by the increased susceptibility to cold, great restlessness, the excitement produced by company, &c. In the other cases alluded to, and in truth in almost every hydro-

phobia patient, we see, even in a more marked degree than in Dr. Hayward's case, a special excitement of the brain and sensory nerves, intolerance of light and sound, the excitation of the gustatory nerve, to which we may attribute the great flow of saliva; just as the same effect is produced by stimulating those nerves in the natural way with pungent or savoury articles of food. The ear is so sensitive to sound as that even the trickling of water or the rustling of a dress produces distressing excitement. The great irritability of mind, the violent fits of passion, and as the disease progresses, the delirium and sleeplessness preceding death; all go to show that the primary irritation seems to be thrown upon the brain and *posterior* or *sensory* column of the spinal marrow. In a case reported by Magendie, the hearing was restored to a person who had been deaf from birth; Haller mentions the occurrence of violent satyriasis; thirty copulations in a day, and Portal had seen *furor uterinus* under like circumstances. When we see the brain, the nerves of touch, the nerves of taste, of hearing and of vision, and even in Dr. Marcet's case, the olfactory nerve, in this state of excitation and morbid sensibility, we must naturally come to the conclusion that the great centres of sensation are more especially involved.

Let us now look at Dr. Hayward's case of tetanus, and viewing it in connection with the hydrophobic patient, let us see in what they differ. A gentleman fell in the street, and a compound dislocation of the thumb was the consequence. Six days afterwards he spoke of a sensation of stiffness in the neck. During the day the *rigidity of the muscles of the jaw* became considerable. Any attempt to swallow increased the immobility of the jaw, and when the head was not supported, there was a strong and uncontrollable tendency to be drawn backwards. *The mind was perfectly rational and calm.* He died on the third day from asphyxia, having opisthotonos and violent spasms of the whole body. *He remained perfectly rational to the last.*

This case is the epitome of the experience of every man who has had to treat this dreadful disease. The great and predominant symptom is always a violent and uncontrollable excitation of the *nerves of motion*. Immobility of the jaw, rigidity of the muscles of the spine, of the face, and sometimes of the whole body, violent and often unprovoked spasm of the larynx and pharynx, all these symptoms prove that the irritation is to be traced to that portion of the spinal system which is immediately connected with the nerves of the voluntary muscles. Its seat then is to be found in the *anterior* or *motor* column of the spinal marrow. The brain is calm and unaffected, the sensations are generally not vitiated or excited, the mind is not irritable, the patient dies either from laryngismus or nervous exhaustion. The great motor system of nerves is in a state of unappeasable excitement, which ends only with death.

Then may we not draw a strong distinction between the two diseases? Hydrophobia having its origin in the *posterior* or *sensory* bundle of spinal nerves going *towards* the brain and gradually complicating that organ—involving and exciting all of the nerves of sensation, and

terminating with delirium and death. Tetanus, on the other hand, affecting the *anterior* or *motor* bundle of spinal nerves coming from the brain, leaves that organ undisturbed, but displays itself by terrific and incurable spasms of the nerves of motion, and producing death either by asphyxia caused by laryngismus, or else, worn out by the extravagant waste of nervous force, the patient sinks from exhaustion.

It is not difficult now to see why it is that these two diseases are so blended together as to be believed by many to be one and the same. The tetanic irritation of the anterior motor spinal column, and the hydrophobic irritation of the posterior or sensory bundle of spinal nerves, are so intimately connected and tied together by the *special* spinal system, that it is impossible, if great excitability is produced in one, to prevent the other from sympathizing at once. The *ingoin*g nerve of the reflex spinal system, and the nerves of sensation which are involved in hydrophobia, are bound up together in the posterior bundle, and hence if the hydrophobic irritation is situated in this posterior or sensory tract, this eisdic nerve will after a time carry to the spinal ganglion and thence transmit to the *outgoing* nerve, which is bound up in common with the *anterior* or motor tract, the impression of irritation, and hence the motor nerves becomes involved. Then, too, if the *tetanic* irritation is situated in the anterior or motor column, the exodic nerve of the reflex system is exposed to the same impression, and hence it is impossible for disease of this intense and potent character to reside long in either of the great cerebro-spinal systems, without becoming blended together through the agency of the special spinal system with which they are both so intimately connected. Hence in tetanus we see the touch of the finger applied to the wrist produce violent contractions of the voluntary muscles. How is it? The reflex system has become at last involved. The ingoining nerve conveying with morbid alacrity the impression to the spinal ganglion, and the equally fretful outgoing nerve carries the irritation with lightning speed to the muscles of the larynx or lower jaw—so, in hydrophobia, the gustatory nerve is greatly excited in common with the posterior sensory tract and the eisdic reflex nerve bound up with it. The impression transmitted to the efferent motor nerve contracts with great violence the muscles of the pharynx and deglutition is prevented, and so if our space did not forbid, we might go on to account for all of the symptoms which are in common to the two diseases.

May we not make the theory we here suggest more forcible by comparing the tetanic irritation with the irritant effect of the poison strychnia?—the exciting poison and the exciting disease produce like symptoms, and invade in like manner the functions of the anterior motor system of spinal nerves. They may be called analogues, one of the other. On the other hand, though in not so striking a degree, we may regard the effect of alcohol or opium in small doses as being somewhat analogous in their effects on the spinal marrow to those produced by the hydrophobic virus; bearing more especially on the nerves of sensation, exalting and stimulating the senses of taste, of hearing,

of vision, arousing the brain and intellect, and ending in delirium and coma.

Also, is it not worth a thought, upon the theory of substituting an ephemeral, curable irritation, for an incurable and ungovernable one, whether strychnine given in doses large enough to produce its specific effect on the motor spinal system *might* not substitute itself for the fatal and unmanageable disease which it so much simulates? We use the nitrate of silver in acute inflammations upon this theory. We could point out many remedies successfully applied upon such conclusions, and we have seen a schism in medicine reared by Hahnemann and based mainly upon such deductions as these. We have no remedial agent yet used which *can* control tetanus. We have but lately used chloroform patiently and perseveringly without the slightest avail. Opium is unsuccessful, and alcohol, though strongly recommended by many authors, is equally without effect.

The remedies last named, (alcohol or opium,) if the theory we have just given be correct, might be used with more hopes of success in hydrophobia than in tetanus. They bear more decidedly on the sensory than on the motor system of nerves, and as we are determined to give to our next tetanic patient strychnine, in full doses, and strive to oust our fierce enemy from its strong hold by means of its potent agency, so we think that in the early stages of hydrophobia something may be hoped from the bold use of alcohol in intoxicating doses. It is undoubtedly true that this remedy thus applied, does control the poisonous bite of venomous snakes, and the analogy is very striking between the patient poisoned by the virus of the rabid dog or cat, and he who is poisoned by the virus of the rattlesnake, and we *know* that the alcoholic stimulant is curative under such circumstances.

We have not yet touched upon the interesting questions: How are these two poisons transmitted to the spinal marrow? Does the hydrophobic poison make its entrance through the medium of the blood? Does tetanus invade the system by way of the nervous chords? We leave our reflective reader to think upon these important enquiries, and we may at a future time attempt ourselves to give them an answer.

[M.

Dr. Marshall Hall.

This distinguished physician is continuing his tour through the South, tarrying in each of the large cities, and receiving those tributes of respect and admiration to which he is so richly entitled. His sojourn in Richmond was pleasant and instructive to all who came in contact with him. He delivered two lectures here, and subsequently wrote them down for publication in this journal. We present our readers with the second of these discourses in the present number, and are glad to inform them at the same time that Dr. Hall was kind enough to promise us that this should not be his last contribution to our pages.

BIBLIOGRAPHICAL RECORD.

- I. *Considerations with Regard to the Hygiene and Sanatory Economy of Cities.* Charleston. By Dr. WILLIAM T. WRAGG. [Southern Quarterly Review, Jan. 1854.]

The most interesting question which can agitate the public mind—we mean the question which bears most potently on our well being in this world—is, How can we best preserve our health perfect, and ward off or avoid disease? How can we make our physical man arrive at perfection? and then, How to keep it at that point for the longest period possible?

This is a study which must be acknowledged to be at once a vital and all important one; and yet how woefully is it neglected by us individually and as a people. We live in a country more blessed by nature and circumstances than any on the face of the globe; where man has the opportunity, if he so chooses, to arrive at the very highest point, both of physical and intellectual grandeur; and yet how rarely do we take advantage of these great privileges. We are always prating about the “progress of the age,” “the magnificent advances in science,” “the brilliant discoveries of the nineteenth century;” and yet in this favoured land, we are becoming more short-lived, more liable to disease, more scourged by pestilence, more reduced in stature, and more deficient in personal beauty and strength as each generation follows the other, until already we strike the eye of the stranger as being a nation of prematurely old people, a sallow skinned, illy developed, decrepid and bald headed community, who look when compared with a jolly old Englishman, like a lank yellow carrot by a rosy cheeked apple.

Why is this so? Our country revels in abundance. Abundance of food, both of meat and bread; abundance of air coming pure and fresh from our numerous mountain ranges; abundance of limpid water in every direction, so plenty that we might be called the land of fountains and baths, of cleanly cities and well watered streets, and as New England is called “the land of steady habits,” what a pity it is that we of the South do not aspire to the name of the land of cleanly habits. How necessary is the free use of water to us in our tropical climate in order to preserve our health and keep our cities free from disease, and how fatal must be the consequences of our neglect of those precautions which even the half civilized Turk and the heathen Hindoo avails himself so liberally of in order to counteract the disorders and pestilences which their burning suns and masses of decomposing vegetation are so apt to engender.

These thoughts have been suggested by a perusal of a long and very interesting article in the Southern Quarterly Review, which we have made the caption to this paper, and we are sure, that the influence and

weight of that most able and dignified periodical, assisted, as it is in this instance, by the labours and studies of the medical profession, could not be united on any question of more vital importance to us, both individually and collectively, than this of *the public health*.

Dr. Wragg shews that in England where, although surrounded by natural difficulties which we have never dreamed of, they are much in advance of us in the study of this important question; it has been ascertained that the rates of mortality might be reduced two per cent., and that the lives of 50,000 persons might be saved annually in the United Kingdom if proper sanatory precautions were adopted; yet a man's chance is better in England to live to the age of fifty years than in this country; for in 10,000 English there are found 1365 beyond the age of 50, while of 10,000 Americans there are only 830.

How then are we to save this vast population from the jaws of death, and retain them as useful and healthy citizens of our sparsely populated country?

The answer to this question may be briefly given as follows: Let us introduce into our habits and ways of living a system of cleanliness and purity which will pervade and modify every portion of our existence. Let us be pure in our thoughts and conversations, let us eat pure and simple food and drink pure water, let us live in houses filled with pure air, and in cities which are thoroughly drained with pure sewers, let our streets be constantly irrigated, and filled with parks of beautiful trees, and let sparkling fountains and basins of fresh water be seen in every direction, let our supply of water be unlimited, so that every sewer and drain, every house and street has running through it and washing it out, a plentiful stream of this greatest of God's gifts,—do this and we can bid defiance to pestilences, and epidemic diseases, or if they come, we will soon deprive them of their sting and make them innocuous. Let every reader of the Southern Quarterly study Dr. Wragg's paper carefully, and he will satisfy himself that all the pestilences which have been desolating the world, whether so called contagious or non-contagious, invariably select for their residence those places, whether in country or city, which are the receptacles of filth and impurity, where an over-crowded population, ill-ventilated cellars, and badly drained streets or alleys, where poverty and want, bad food and strong drink stare you in the face at every turn.

Years ago, in the jungles of India, through the combined agencies of intense heat and great amounts of decaying vegetation, steeping for centuries in stagnant pools of water, there was generated a fierce and fatal sickness which ravaged that country for years. At last, the noxious pestilence so accumulated as to be no longer contented to remain in the place of its nativity, and boiled over, like a huge stream of lava pouring down Etna's rugged sides, and spread itself over the steppes of Tartary and the immense plains of Russia. It rapidly approached our own shores. Then it was that first the awful cry pervaded the land, "the cholera is coming." On it rushed with a resistless current, and as it approached each town and city, it looked about like a midnight assassin or a prowling thief for a dwelling place suited to its wants.

Wherever it found a condition of things similar to that it left behind in its native home, there it dwelt, and taking a second root, it would spread with renewed vigour in all directions. But carry that awful scourge to our *model city*. As it approaches and looks down upon the doomed spot, it sees it surrounded by noble reservoirs pouring through every street and house, every sewer and drain, its pure and healthy current; scattered in all directions are large and leafy parks, and the leaves are glistening with the drops which are thrown by the lofty fountains; the fearful visitor turns away with disgust from a spot so uncongenial to its taste, and seeks elsewhere for its favourite haunts, where cesspools, and dry sewers, filthy houses, and putrifying matters abound.

Dr. Wragg shows conclusively that not only cholera, but yellow fever, typhus and influenza pursue the same route, and may be checked and controlled in the same way. He also gives the various methods of drainage recommended by the parliamentary committees and such as have been suggested by numerous experiments; the size and shape of the main sewer, the method of uniting the smaller drains with this main artery, the material best adapted for such purposes, and many other interesting topics for which we must refer our readers to the article itself.*

It may be said in answer to this argument shewing the great necessity of sewerage, drainage, &c., that all of our cities have already such systems more or less perfect, and yet they are found ineffectual. It is true that almost every town of any magnitude has some such things as drains or ditches *intended* to carry off the garbage and accumulated filth of the streets and houses. But the work is only half done. Supposing that drains are large enough, which they rarely are, and so arranged as to cover the whole area on which the town is built, which they never are; yet the work is but half done. The machinery by which the noxious materials are to be expelled is perfect; but *where is the expellant power?* What is the use of gathering all the offal and impurities of every house and concentrate it in one immense mass in the main sewer in the centre of the streets? If you do that, it is arranging it in the manner most favourable to the generation of these very noxious elements which we desire to drive away from us. Go to the grating of any sewer, even here in this city of Richmond, built upon the sides of abrupt hills and with everything favourable to a perfect system of drainage, stand near the mouths of these sewers, and your olfactories will soon give you notice that sewers do not always cleanse a city, but often act as great retorts to generate the very noisome gases which it is their object to remove. We must have the

* We will take occasion here to say that the Southern Quarterly Review to which we owe this valuable paper ought to be supported by every *Southern* man. It is always true to our interests, and the able and dignified exponent of our views and feelings, and is worth a hundred of such trashy pamphlets as boast of their subscribers by thousands, and are filled up with poor pictures and poorer matter, whilst our own literature is neglected and permitted to die from inanition.

expellant power. No drainage can be complete without a continual flow of fresh water into the town. The supply of water must be enough to pour through each underground artery a pure current, washing out minute by minute, and hour by hour, everything impure which may be carried in. Hence the advantage of fountains; they moderate the heat, they freshen the foliage, they add beauty and grace to the city, and more than all, they pour through every dirty pool of accumulated impurities the healthful stream; sweeping away all that would tend to develop disease and injure the general health.

People of America take these things to heart. Rushing on with resistless force in every thing you do; going faster than any other people in the rail car and on the steamboat, over the ocean and over the land, making money faster and building cities faster—you are also going to your graves faster than any people on earth. You won't consent to remain children long, but you hasten on to manhood in spite of nature's laws—prematurely decrepid, a good old age is denied you, and you go down to your graves before you have passed the meridian of life—the average age at death in this country is only 20 years.

Let us then turn our attention sometimes from the engrossing occupations of money making and legislating, of buying and selling. Let us give some of our superabundant energies to the great task of remedying the evils upon which we have been dwelling, and be assured that one of the most important questions which can be presented for our consideration, is how we can best preserve and increase the *public health*.

II. 1. *Elementary Chemistry, Theoretical and Practical*. By GEORGE FOWNES, F. R. S., etc. Edited, with additions, by ROBERT BRIDGES, M. D. A new American, from the third London edition. Philadelphia: Blanchard & Lea. 1853.

2. *De l'importance de la chimie dans les sciences médicales*. Par LOUIS FIGUIER. Opuscule in-8 de 108 pages; à Paris, Masson. 1853.

Of the Importance of Chemistry in Medicine, etc.

The first of these works is a standard manual, which has long enjoyed the reputation of embodying much knowledge in a small space. The author achieved the difficult task of condensation with masterly tact. His book is concise without being dry, and brief without being too dogmatic or general. We only regret that so little space is devoted to animal chemistry. 22 pages out of 555 is surely an inadequate appropriation to such an important subject.

Ever since the celebrated aphorism of Stahl: *Chemiæ usus in medicina fere nullus*, it has been fashionable among some physicians to decry the utility of chemistry applied to medicine, and notwithstanding the brilliant results attained by chemical science during the last few years, there are many educated and estimable practitioners in Virginia who are quite skeptical as to its practical advantages. It is this fact

that has induced us to notice Dr. Figuier's vehement protestation against the banishment of chemistry from the Hippocratic sanctuary.

A brief review of the aid which chemistry has brought to physiology, pathology, therapeutics, hygiene and toxicology, must convince us of our great indebtedness to this science.

It has bestowed on physiology an instrument of research which has revealed the secret mechanism of many of our functions, so that our views of digestion, respiration, absorption and secretion, have become more precise and clearer.

In pathology, to mention only the more striking facts, it has shown that when the blood contains more than 5 per cent. of fibrin, we may be confident that there exists a phlegmasia of some organ, (Andral;) and that fevers may destroy the coagulability of the blood, and therefore differ essentially from inflammations. Chemistry throws some light on the morbid alterations of the fluids,—anæmia, plethora, and scurvy, and explains the good effects of iron and manganese in the first of these affections. It has taught us the diagnosis of albuminuria and diabetes, and the appropriate treatment of the latter disease, and has given us more precise views in regard to the formation of biliary and urinary concretions.

While still in its cradle, it furnished the therapist with antimony, iron, mercury, zinc and phosphorus. Since the commencement of this century, it has successively discovered quinine, morphia, strychnia, bromine, iodine and cyanogen, either in the simple or combined state; it has presented us with anæsthetic agents, and has taught us the composition of natural mineral waters.

In public hygiene, chemistry has pointed out the means of remedying the injurious effects of certain trades, and has investigated the influences of air and water in different localities, and the effects of drinks and aliments.

The science of toxicology is altogether founded upon chemistry.

From an analysis of facts of this sort, Dr. Figuier concludes that chemistry has contributed, in our century, more actively than any other science to the advancement of the healing art. [M.

III.—*Transactions of the Fourth Annual Meeting of the Medical Society of Georgia.* Savannah, April 1853. Pamphlet, pp. 98. (From Dr. Kollock).

This publication comprises the minutes of the annual meeting of the Medical Society of Georgia, six reports, two biographical sketches, a memoir on the sulphate of cinchona, and the president's address.

The first matter of interest which we have observed, is a report upon the claims of Dr. C. W. Long to the discovery of anæsthesia. We have alluded on a former occasion to this physician's pretended priority in the use of sulphuric ether in operations, and are glad to be able to lay before our readers the facts upon which these claims are based. The honourable association, the proceedings of which we are reviewing, was perfectly satisfied of the reality of these facts, and of Dr.

Long's uprightness and probity, and expressed the unanimous opinion that he was entitled to the credit of priority in the use of ether as an anæsthetic agent. It appears from the report that Dr. Long possesses conclusive evidence that he used ether as an anæsthetic on the 30th of March, 1842, in removing a tumour from the neck of James M. Venable, of Jefferson, Jackson county, Ga. That he subsequently used ether by inhalation from a towel until anæsthesia was produced, on the 6th of June, and on the 3d of July, 1842, in two operations. That on September 9th, 1843, he used the ether in like manner, and on the 8th of January, again employed it successfully in an amputation. The committee "are unacquainted with any of the witnesses who testify in favour of Dr. Long's use of this article, but after a careful examination of all the certificates and affidavits exhibited to them, see no circumstance calculated to cast the slightest suspicion upon their truth or correctness." We receive no explanation of Dr. Long's reasons for not making known his discovery at an earlier date.

Another report refers to the existing laws of Georgia, relating to medicine. It appears that there is a licensing board of physicians in Georgia for regular practitioners, and another for Thomsonians.—The graduates of the medical schools of the State are exempted from the requisition of procuring a license from these bodies, and the Legislature from time to time authorizes batches of quacks to pursue their nefarious objects.

There are several valuable reports upon the topography and diseases of different sections of the State, but our limits compel us to refer those interested in this subject to these documents themselves. We shall allude hereafter to a report by Professor Dugas on the best mode of treating fractures in country practice. As to the president's address, we find that Dr. Juriah Harris jingles the old bells very much as other presidents do. We have the same obvious Latin quotations, the same reiteration of facts which have long since passed into the common treasury, the same careless diction, and the same disregard of the principle that the object of speech is in some measure to unfold thought.

IV. *Report of the Standing Committee on Surgery; read before the Kentucky State Medical Society.* By JOSHUA B. FLINT, M. D. Published by the Author. Louisville. 1853.

Many of the older members of our profession, particularly those of them who have never made much figure in it, are wont to descant on its "degeneracy," and to contrast its present position with their early reminiscences, with a complacency which reminds one of Coleridge's friend who always took off his hat with great demonstration of respect whenever he spoke of himself. The magazine scribblers have taken up the same note, and complain (in Putnam) of the inferiority of the physicians of the present day, in polite attainments, to Abuthnot and Garth, and other worthies of the time of Pope. We will not imitate these sagacious critics by referring to the disparity between them and

Pope himself, feeling satisfied that it is unnecessary to reply to them at all, since the most superficial judges will estimate a physician by his knowledge of medicine rather than by his acquaintance with Ovid or Statius, and the most ignorant reader is aware that the stock of medical knowledge which existed an hundred and fifty years ago has been so carefully improved that the accumulated interest now exceeds the principal, and that the fund of general knowledge has likewise increased immeasurably, so that the cultivated physician of the present day excels in scientific skill and general information all of his predecessors.

“Pygmæi gigantum humeris impositi plus quam ipsi gigantes vident.”

Our opinion of the dignity or degradation of medicine is summed up in a few words by Sir Benjamin Brodie: “Gentlemen, he said, in a recent address, medicine is a noble *science*, but a low *trade*.” We will say to the discontented elders, that with the rise of great cities and the unprecedented activity which pervades all departments of life, the facilities for quackery have augmented, and, the human family being no less credulous than formerly, the number of traders in medicine has increased; but we can never entertain for a moment the opinion that the number of conscientious and scientific physicians has diminished. In this country even, where the temptations to charlatanism have fearfully multiplied, there are thousands who prefer the straight path to intrigue; and, although they have no legal protection against the invasion of unworthy associates or the competition of unscrupulous quacks, the legitimate practitioners of America compare favourably in education and character with the physicians of any age or country.

The very fact, however, that the profession is unorganized, and that its place in public estimation depends upon the individual character of its members, should make us doubly vigilant in detecting and exposing the abuses which creep into it.

Dr. Flint has undertaken to point out the abuses practiced by some surgeons of the present day; and has certainly achieved this task with unsparing candour and fidelity.

The first subject on which our author comments is not a novel one. Since surgery has possessed the means of controlling hæmorrhage with tolerable certainty, “*tenet insanabile multos secandi cacoëthes*” has been a truth which, unhappily, has had too many illustrations. Liston himself, however, in his bitterest denunciations of “the knivesmen,” never condemned this abuse more forcibly than Dr. Flint has done. We will present our readers with an extract, that they may judge for themselves:

“The passion for operating, always sufficiently conspicuous in miscellaneous practice, has displayed itself, at different times, with appalling recklessness, in the conduct of specialities, and gathered its bloody laurels under favour of a present infatuation or panic respecting a particular form of disease. The *circulatores* of the middle ages, and the *emasculatores* of the

eighteenth century, present remarkable illustrations of surgery run mad, in times past, while the *myotomists*, the *ovariotomists* and the *womb-burners* of our own day, may fairly contend for the distinction of furnishing a modern parallel.

"A tempting field for indulging the 'rage for cruel and bloody operations,' which, Dr. Lee says, 'has spread far and wide in England, and threatens to pervert and corrupt the sound and fundamental doctrines of British practice,' is found in the treatment of morbid growths and malignant degenerations presenting themselves in the form of tumours, on the surface or in the cavities of the body. In the management of these diseases, a class of questions arises, the determination of which often involves the character of surgery in general, as well as that of the practitioner immediately interested, and exhibits, in signal contrast, the sound, conservative surgery of science, and that flippant reckless counterfeit of it, that rests in artisanship.

"In the midst of these perplexing questions of diagnosis and treatment, with which such cases often confound the most competent practitioner, the true surgeon pauses, watches, consults, palliates and perhaps cures—the hero of the scalpel cuts the gordian knot, and with it, perhaps, the life-thread of the patient. * * * * *

"A gentleman in an eastern city was once exhibiting to a circle of medical friends, a specimen of cancerous disease upon a penis, that he had amputated a day or two before. 'Cancer?'—says one, interrogatively—'Cancer!' said another in a tone of absolute negation—'Pox;' said a third, in a tone as absolutely affirmative. And so indeed it was. Some ugly venereal ulcerations, which might have been cured, had been mistaken by the ambitious operator for cancerous degeneration, and his patient suffered accordingly. All were ready with some excusative suggestion to palliate the mortification and regret of the operator, and one of them with a jest and pun, that on a less serious subject, would have been absolutely perfect, reminded the unfortunate that he had only 'sacrificed a cock to Æsculapius.'

"An honest misapprehension of duty, as in this case, is, undoubtedly, chargeable with a considerable part of the reprehensible operations that take place, and the recurrence of such accidents may be prevented by a better diagnosis, and a more faithful communication of the results of practice, supplying an approximation at least, to rules of proceeding that will be more or less authoritative. But the most aggravated misdemeanors of the kind we are contemplating, cannot plead even the poor excuse of dullness, nor carry with them the hope of amendment from increasing light and knowledge. They are not 'sacrifices to Æsculapius,' nor to any other of the Gods of medicine, but are perpetrated in the spirit of a base idolatry of self and mammon. Amidst the blandishments of such a service, what weight have the sober suggestions of pathological science? what heed the gentle appeals of humanity? Fascinated by the eclat of a great operation, fired with the idea of cutting his way to instant fame and fortune, the adventurer in surgery, or the veteran offender against its highest laws, plumes himself upon exploits that are much more properly *vivisections* than therapeutics, and which convert the operating room into a *theatre* indeed, the hero of whose drama is truly a *performer*, and his part too often a tragical one to the last degree. So completely dramatic is the idea of surgical practice which has taken possession of some minds, that the eulogist of a famous operator, describing with admiration the details of his performances, assures us that his 'assistants were regularly drilled, until, *like Thespians*, they perfectly understood their parts.' "

Dr. Flint inveighs against those who abuse the speculum with equal

severity. We are glad to hear some one raise his voice against this growing evil :

“ Playing upon the fears or hopes of women ; now raising the bugbear of cancer, and now whispering the seductive promise of long-deferred fecundity, aided by a corps of gentle gossips, sometimes initiated into the service, it is said, by the privilege of a peep through the magic tube themselves—‘ sisters of the speculatorium,’ as our facetious neighbour of the Nashville Journal denominates them—the adroit ‘ speculator’ finds it not difficult to create in the community, a kind of *utero-mania*, which, like other infatuations, invites imposition while it rewards the impostor. Wearisome weeks and months of needless decumbiture, occasional miscarriages from rude interference with unrecognized or disregarded pregnancy, and a world of *martyrdom* of feeling, the crown of which is only in the doctor’s pocket, are the too frequent fruits of this delusion. The best that can be said of such business, is that it is not manly, and although, claiming to be a part of obstetrics, it may take exception to our jurisdiction, having intruded itself upon the domain of surgery, and become a nuisance there, it must not escape from the application of strictures intended to contemplate the abuses of every species of operative medicine.”

We should be pleased, if space permitted, to make farther extracts from this excellent paper. We learn from the introduction that it was not printed with the Transactions of the Kentucky Medical Society, because of the objections of Dr. Gross to that portion of it which treated of “ professional extortion,” and of Dr. Miller to the passage in relation to “ abuses of the speculum.” We know nothing of the causes which induced these surgeons to regard the passages referred to as invidious ; we only know that the report appears to us to be written in a fearless and manly spirit, and we hope that it will be extensively circulated and read.

V, *On the Use and Abuse of Alcoholic Liquors.* By WILLIAM B. CARPENTER, M. D., F. R. S., etc. With a Preface, by D. F. CONDIE, M. D., etc. Philadelphia. 1853. Small octavo, pp. 178. Blanchard & Lea.

As to the use of alcoholic stimuli, Dr. Carpenter appears to have adopted the motto, “ *quærite et non invenietis.*” Their utility in disease even is quite a mistaken notion, and as to their beneficial effects in debilitated states of the system unconnected with absolute disease, or during exposure to intense cold, this is quite out of the question. Dr. Condie feebly chimes in with these opinions, of which we may say briefly, as we intend to recur to the subject, that they are extravagant, and that, as a good cause needs no exaggeration, we are sorry that they have been promulgated.

Those who wish to enrich themselves with plausible scientific arguments for “ total abstinence societies,” and “ Maine liquor laws,” can do so at very small expense by purchasing Dr. Carpenter’s little volume. Copies of it have been handed to us by Mr. A. Morris, and by Mr. Joseph Randolph.

VI. *A Treatise on the Diseases of the Eye.* By W. LAWRENCE, F. R. S. Edited with numerous Additions by ISAAC HAYS, M. D., etc. A new Edition. 8vo., pp. 948. Philadelphia, 1854. Blanchard & Lea. (From the Publishers.)

This work has been a standard book of reference in this country for many years, chiefly, we believe, from the fact that it has been the only large systematic treatise on ophthalmic medicine which has been published among us.

Although many copies of Mr. Lawrence's second edition have slumbered peacefully on the booksellers' shelves in the Strand for the last thirteen years, and no demand for a new edition has been heard at home, another American reprint has been called for, in consequence, no doubt, of the cause specified above, and the author having judiciously declined to revise a treatise, so many portions of which had become obsolete, Dr. Hays has undertaken the labour of making the work "a faithful exponent of the present state of ophthalmic pathology and practice." He has not performed this task by carefully expunging useless matter, and incorporating the results of recent researches, but by inserting innumerable "additions," consisting chiefly of clippings from English journals, and extracts from the editor's "experience." Mr. Lawrence himself, without making any original contributions of importance either to the pathology or therapeutics of eye diseases, ransacked pretty thoroughly the ophthalmological literature of Europe twenty years ago; Dr. Hays has examined periodicals with equal fidelity, and between the two the lean book is larded with the fat of others writings, and has attained a formidable bulk. "*Castrant alios, ut suos libros, per se graciles, alieno adipe suffarciant.*" The book is too little digested, and too much made up. It is too unwieldy for the student, and contains too much that has been contradicted by modern investigation to make it valuable as a work of reference. The editor finds it necessary to apologise for the "theory of inflammation;" the important researches of Budge upon the iris,* and of Kölliker and Müller upon the structure of the retina,† and Sichel's magnificent iconographic work are not deemed worthy of mention. Anæmic exophthalmus, an affection to which Dr. Begbie, of Edinburgh, has ably called attention, is barely alluded to, and the most plausible explanation that has yet been given of it, we mean Dr. Mackenzie's opinion, that it depends on varicosity of the ophthalmic veins, is not mentioned. Dr. Hays endorses his author's routine practice of bleeding to syncope in purulent ophthalmia, and says nothing of the practise of incising the conjunctiva in this disease, although the best surgeons (Mackenzie, Desmarres, Walton) now agree that incisions are all important, and will save the eye if it can be saved. So far from attempting to throw any new light upon the diagnosis of cataract, the editor is satisfied

* *Aus dem Archiv. für Physiologische Heilkunde; Ergänzungsheft*, 1852. (Archives of Physiological Medicine, supplementary number, 1852.) By Professor JULIUS BUDGE, of Bonn.

† *Comptes Rendus de l'Académie des Sciences.* T. xxxvii., p. 488. Sept. 1858.

with pronouncing the catoptric test "unerring." Daily experience proves that cataract may exist, at a tolerably advanced stage even, and that the three images in Purkinje's experiment (for the employment of which Dr. Hays gives no directions which we can discover) may yet be distinctly seen, especially when the opacity occupies the circumference of the lens, as it often does. This may even be the case when the opacity is visible upon dilatation of the pupil.* The colouration of the lens in elderly persons so modifies the reflections of the candle flame that Mr. Walton discards the catoptric test in these cases as "worse than useless."†

The only portions of Dr. Hays' additions in which we can find any pretensions to originality, refer to "that surgical lottery, strabismus-cutting," and the treatment of epiphora. We shall briefly describe "the editor's mode of operating" in the former affection, which has been practiced for twelve years, in many cases, "without a single unfortunate occurrence!!"

"The first step in the operation," he says, (p. 888,) "consists in the separation of the eyelids." The announcement of this startling novelty is followed by the recommendation of a steel wire speculum, resembling an antique instrument of torture, with long prongs diverging rather more than two and a half inches, imitated from Velpeau's spring forceps. "The second step is the division of the conjunctiva," which is accomplished by pinching up a horizontal fold of that membrane with "a pair of toothed forceps," (Fig. 222,) and "making a perpendicular slit" with scissors, (Fig. 223.) We are here reminded "that a very good method of dividing the conjunctiva is with the *small iris knife*, (Fig. 225.) For some inexplicable reason, the surgeon must now dissect the conjunctiva "to a sufficient extent" (!) with another knife, (Fig. 226.) This being accomplished, a blunt hook is to be introduced beneath the muscle; "this sometimes presents difficulties to the inexperienced practitioner, which may be obviated by the use of a hook such as is represented in Fig. 227," which instrument is remarkable for being made of silver. Passing over various minutiae, we come to the last step in the operation, which "consists in the division of the muscle" by scissors.

What is there of originality in all this that it should be styled a peculiar method? Even the mischievous practice of extensively dissecting the conjunctiva has been long since advocated. (Verhæghe, *du Strabisme*, p. 41. 1841.)

Though sound surgeons are now almost unanimous in condemning ocular myotomy except in rare cases, Dr. Hays makes it the rule, and even operates on a "boy of hæmorrhagic diathesis, whose life had previously been in danger several times from hæmorrhage after slight injuries," (p. 882.) He recommends six instruments for this trivial operation, magnifies its difficulties, recapitulates a hundred trifling de-

* DESMARRES, *Maladies des Yeux*, p. 538.

† *London Medical Times and Gazette*, October 1st, 1853.

tails in its performance, and hopelessly obscures the whole subject. Let the reader compare the editor's three pages of twaddle with the brevity with which a master dismisses the subject :

M. Velpeau "seizes the conjunctiva, fascia, and sometimes the muscle, between two forceps, one of which is held by an assistant, and divides the tissues with scissors held in the right hand. If the muscle has been properly secured in the first place, the operation is thus terminated at a single stroke." (*Ann. de Chirurgie*. March 1842.)

In the treatment of obstructions of the lacrymal passages Dr. Hays relies entirely upon catheterism, which he has employed "in a large number of cases" and "with very gratifying success." He does not fail to descant on the "skilful manipulation" and "perfect knowledge of anatomy" required in this very simple operation. He rejects the bulbous probes recommended by Tyrrell, and employed universally, we had thought, and advocates a steel wire closely analogous to an hair-pin, as a proper instrument for traversing the delicate lacrymo nasal passage. We need not bring the authority of Rosas, Jæger, and Sanson to prove the insufficiency of this method, even when it is properly performed, for every surgeon of the slightest experience must know that it fails to effect a cure in the majority of cases. "A probe passed through one of the canaliculi, says Mr. Walton,* can never, from its necessary smallness, be of much use, if indeed of any, in removing an obstruction of the tube."

Dr. Hays inveighs bitterly against the operation for obliteration of the lacrymal sac in cases of incurable fistula and epiphora. He quotes Dr. Desmarres' observation "that if the lacrymal conduits do not exist congenitally, as has been observed by many surgeons, or if they have been destroyed accidentally, which is certainly still more frequent, the patients are not on that account afflicted necessarily with epiphora,"† and expresses his astonishment at the "miracle performed by Dr. Desmarres" in curing a lady of Rheims of epiphora by destroying the sac. and his "conviction that no one else will ever do the same."

The operation in question, of which Dr. Hays appears to have derived all his information from a quotation in Mr. Walton's book and a late article by Dr. Berry, was proposed more than a century ago by Nannoni,‡ and successfully executed by him, and also by Volpi, Bianchini and Camicci.§ Bosche, Quesnel and Serra|| recognized the advantages of occluding the lacrymal passages, but preferred to attain this object by obliterating the puncta. Delpech and Caffort equally advocated this measure.¶

* HAYNES WALTON. *Operative Ophthalmic Surgery*. Eng. ed., p. 225.

† DESMARRÉS. *Traité théorique et pratique des maladies des yeux*. P. 891.

‡ NANNOI. *Trattato delle materie chirurgiche*. Vol. I., p. 268.

§ TAVIGOT. *Traité clinique des maladies des yeux*, p. 610.

|| *IBID.*, loc. cit.

¶ DESMARRÉS, loc. cit.

When Professor Juennen, of Berlin, was in Paris in May 1852, he expressed himself in these terms :

“I have long known that the various procedures employed in dilating the lacrymal passages *failed in the majority of cases, and were almost constantly insufficient* in restoring the natural course of the tears. I then had recourse to the destruction of the sac by caustics. *For thirty years* I have practised this operation, and *have spoken of it in my work* on diseases of the eye. Since I recognized the fact that the destruction of the sac was preferable to other methods, I have used all sorts of caustics and acids for this purpose; but for the last ten years I have always employed chloride of zinc. In ten years I have operated *upon more than seven hundred fistulae*, and have been able to congratulate myself upon the results.”*

Vidal speaks of the operation of obliterating the lacrymal passages, and observes that when this is done,—“*chose remarquable, il ya d’abord un épiphora qui diminue peu à peu, et qui finit ensuite par disparaître.*”†

Dr. Hasner, professor of ophthalmology at Prague, believes that *fistula lacrymalis* generally depends upon obstruction of the inferior extremity of the nasal duct, and advises, in his work on the pathology and physiology of the lacrymal passages, the obliteration of the sac. Rosas does not reject this method, and for the last three years M. Magne has employed it in a great number of cases, with uniform success, except in one instance in which there was caries of the orbit. This surgeon uses butter of antimony as the escharotic.‡ Dr. Stoeber’s experience coincides entirely with that of M. Magne, except that he uses caustic potash.§ Dr. W. Roser, in his ophthalmological aphorisms,|| admits Dr. Hasner’s opinion in regard to the inutility of the usual operations for fistula, and recommends the occlusion of the sac, an operation which, he affirms, “is never followed by any sort of inconvenience.”

Lastly, Dr. Desmarres has obliterated the sac in numerous instances, usually employing the actual cautery for this purpose. We have ourselves seen three of the patients on whom he had operated, and are able to bear testimony that a few weeks after the operation there was no inconvenience from lacrymation. Three other cases may be found in the *Gazette des Hôpitaux*, of June 7th, 1853, reported by Dr. Cecarini, of Rome, which resulted in entire success.¶

* *Gazette des Hopitaux*, 1853. No. 67.

† *Médecine opératoire et pathologie externe*. T. iii, p. 346.

‡ *Annales d’Oculistique*. T. xxv, p. 78 and *Gazette des Hôpitaux*.

§ *An. d’Ocul.* T. xxv, p. 71.

|| *Ibid.* T. xxvi, p. 121.

¶ In a critique in which an attempt was made to damn Mr. Haynes Walton’s book with faint praise (*Am. Jour. of Med. Sci.*, Jan. 1854), a writer whom we suppose to be none other than Dr. Hays, remarks that Mr. Walton is “not perfectly familiar with the literature of the subject” of which he is writing. May not the sneer be returned?

We have not space to examine farther into Dr. Hays' additions on the present occasion. In giving a critical opinion of the whole work we would say that it is unwieldy, ill-digested, the author's matter often incorrect, and the editor's matter characterized by superficial knowledge and an unusual illiberality towards the investigations and performances of other surgeons.

VII. 1. *Functional and Sympathetic Affections of the Heart.* By JOHN W. CORSON, M. D. Pamphlet, pp. 31. (From the Author).

Although it opens in rather melodramatic style, this is on the whole a sensible essay. We regret that the author allows a commendable prejudice to induce him to propound such a novelty as "*angina pectoris, from the use of tobacco,*" and could wish to have the theory that the study of certain diseases favoured their development supported in regard to consumption by something more than the solitary fact that "Laennec died of phthisis." Dr. Corson purposes publishing a volume on this subject in a short time, with a statistical analysis of cases. We wish him all success in the prosecution of this design.

2. *Materia Medica or Pharmacology and Therapeutics.* By WILLIAM TULLY, M. D. Springfield, Mass. Published by JEFFERSON CHURCH, M. D. Vol. I, No. 9.

The ninth number of this learned work treats of Antiphlogistics and Nauseants. We have already alluded to the innovations introduced in this work, and of the learning and laborious industry which characterizes it. It is published in monthly parts.

3. *Diseases of the Uterine System as a Cause of Physical Degeneracy.* By C. D. GRISWOLD, M. D. Pamphlet, pp. 36. New York. Adriance, Sherman & Co. (From the Author).

Dr. Griswold is one of those physicians who believe that quackery is to be eradicated by enlightening the public on medical subjects. He has accordingly published various pamphlets designed to diffuse a knowledge of the true principles of medicine. However we may differ with him in regard to the utility of this task, it is due to Dr. Griswold to say, that in his execution of it we have never seen anything that did not appear to be dictated by honest and conscientious motives. We wish him all success in his humane efforts.

4. *Introductory Lecture at the Kentucky School of Medicine.* By H. M. BULLITT, M. D., etc. (From the Author).

This is a graceful affair, and illustrates the author's fine imagination and familiarity with the poets.

5. *An Address at the Inauguration of the Savannah Medical College.*

By the Right Reverend STEVEN ELLIOTT, D. D., etc. (From Dr. Kollock).

An able and dignified address, in which the reverend author proves that great cities are not indispensable to the establishment of great medical schools, and vindicates the pursuit of medicine from the aspersions of being antagonistic to holy religion.

6. *Twenty-sixth Annual Report of the Western Lunatic Asylum.* Richmond. 1853. Pamphlet, pp. 90. (From Dr. Stribling.)

We learn from this document that 460 patients have been treated at the Staunton Asylum during the past year, being an increase of 37 over the preceding year. 83 of these were discharged; 41 recovered; 6 much improved; 4 improved; 2 unimproved; 3 eloped; and 27 died. The expenses for the past year have been about \$50,000, of which \$12,000 has been paid by patients, and the remainder by the commonwealth. Of the deaths, 2 were from congestive fever; gastritis, 1; pulmonary disease, 5; marasmus, 6; congestion of the brain or cerebritis, 4; cardiac disease, 3; paralysis, 1; gangrene of the scrotum, 1; apoplexy, 1; and epilepsy, 3. As to the probable causes of insanity, we learn that in 271 males and 189 females, ill health of various kinds was the supposed cause in 36 of the former and 24 of the latter; intemperance, 31 males, 1 female; masturbation, 22 males; domestic trouble, 4 males, 12 females; epilepsy, 19 males, 7 females; abuse of tobacco, 2 males, 1 female; etc.

VIII. *A Text Book of Anatomy and Guide to Dissections.* By WASHINGTON R. HANDY, M. D. With 264 illustrations. Philadelphia: Lindsay & Blakiston. 1854. 8vo., pp. 810. (From Mr. J. Woodhouse.)

Dr. Handy is well known as a popular professor in the Baltimore College of Dental Surgery, and as a zealous student of anatomy.

He has prepared the present work with a view of inducing students of dentistry to acquire more of anatomy than a mere knowledge of the teeth and their immediate connections. Its arrangement differs materially from that of most other works on the subject, inasmuch as descriptions of the *physiology* and anatomy of organs are combined, and the different parts are taken up in their functional order and dependency.

The work appears to us an accurate and well written production, and we sincerely hope it may effect the object for which it is designed. The preface is composed with great modesty and good taste.

V A R I E T I E S .

Uretroscope.

We recently described an instrument invented by M. Jobert for the purpose of exploring the cavity of the cervix of the uterus. We have now to announce another innovation, which aims at nothing less than the application of the sense of vision to the diagnosis of diseases of the urethra; what with these two improvements, and Helmholtz' speculum for the retina, and other instruments which are no doubt in store for us, few of the internal organs will long remain exempt from our impertinent inspection.

M. Désormeaux's uretroscope was presented to the French Academy on the 29th of November last. In his description of his apparatus, the inventor modestly alludes to the attempts of Ratier and Segalas to solve the problem which he believes that he has mastered, and attributes their want of success to the want of certain optical instruments which have since been invented.

M. Désormeaux overcomes the difficulty of causing a sufficiency of light to traverse a tube of the calibre of the urethra, by employing a mirror with an orifice in its centre, similar to that used by M. Léon Foucault for illuminating opaque bodies under the microscope. This mirror is placed upon a prolongation of the axis of a straight catheter or rather canula, adapted for the urethra. A bright light is reflected on this mirror by means of a large reflector, the rays being concentrated by a lens, and it is so inclined as to throw the luminous rays it receives directly into the canula. The observer looks through the orifice in the mirror, and sees the illuminated objects at the extremity of the canula inserted into the urethra.

These are the principles on which the instrument is constructed. The inventor was unwilling to weary the academy by entering into the details of execution, but presented the apparatus itself with drawings illustrative of its application. If these are published we shall take care to have them reproduced for the satisfaction of our readers.

Dr. Désormeaux goes on to mention several cases in which his instrument had been applied. M. Mélier had examined with him a patient affected with stricture about the bulb, and they distinctly saw a transverse septum in part obliterating the canal. At the *hôpital du Midi*, M. Ricord and many visitors had seen the mucous membrane beyond the canula, and had noted its great redness, indicative of chronic inflammation.

If a piece of printed paper be placed at the extremity of the canula, the light being cut off, the letters can be seen easily by the reflected

light; the furrows on the epidermis of the palmar surface of the fingers can be made out with equal facility.

The inventor believes that his instrument will be useful not only as an aid to diagnosis, but as a means of deciding certain doctrinal points, such as the reality of urethral chancre, etc.

Dr. Désormeaux has found that a lateral opening does not interfere sensibly with the illumination obtained by his instrument, and an opening of this sort will allow the passage of instruments. He has passed a fine probe through a very narrow stricture in this way. The other applications for which a way is thus opened are obvious. We may now apply with some certainty to diseased portions of the urethra those local applications which are so useful in inflammations of the vagina and cervix. Uretrotomy will no longer be a cutting in the dark.

The author makes one more remark. In the case of the uretroscope the object itself is seen in a right line. It will be easy however to reflect the *image* of the object laterally by a mirror, as Newton did in one of his telescopes. Do our readers perceive the corollaries of this invention? We are to see into every cavity of the organism into which a straight tube can enter. The stomach and colon are already threatened with invasion. Hereafter a "coloscope" will be as necessary in treating dysentery as a speculum in treating "ulcerations of the neck!"

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DEATH OF DR. CHAMBERLAYNE.

DR. LEWIS W. CHAMBERLAYNE, long a respectable practitioner of medicine in Richmond, and for the last sixteen years professor of materia medica and therapeutics in the Richmond Medical College, died at his residence near this city on the 28th of January 1854.

Dr. Chamberlayne graduated at the University of Pennsylvania in 1817. While he devoted himself with ardour to his profession throughout his long career, he was also a useful citizen. The resolutions of the Common Council of this city, of which he was long a member, show the high estimation in which he was held by the community in which he lived.

As a lecturer, Dr. Chamberlayne was characterized by great originality of thought and fluency of expression; as a man he was frank and independent. His death is much regretted by his numerous friends, both public and professional.

Deaths from Chloroform.

In the last number of the Journal we published the details of four deaths from chloroform. We have now to add two more cases to the swelling list of fatal accidents occasioned by this agent.

The first is reported in the *Med. Times and Gazette* for January 7th, by Dr. Wustefeldt, of Neustedt. A drachm of chloroform was administered to a young girl to procure insensibility during the removal of a lipomatous tumour. The surgeon had commenced an incision of the skin, when the patient suddenly fell forwards. All efforts to restore her were unavailing.

The second case is reported in the *New Orleans Med. and Surg. Journal* :

“ A young female, whose great toe was about to be amputated by one of the visiting surgeons of the Charity Hospital, suddenly expired while under the influence of chloroform. It was some time before she could be brought fully under the effects of the anæsthetic : she finally, however, became completely insensible, and before the operation was concluded, she sank and rapidly expired in spite of the most strenuous and judicious efforts of several medical men present. The usual precautions were used in its administration, and no censure can justly be attached to the surgeon or his assistants for the untimely result of the case.

“ A post-mortem was made by the Professor of Physiology in the University of Louisiana, and all the organs were found to be perfectly healthy.”

We are surprised that no names are given in connection with this unhappy affair.

We are now preparing an abstract of the great discussion on accidents from chloroform which lately occurred in the surgical society of Paris. The most eminent of the French surgeons took part in it, and by condensing their various opinions, we hope to present our readers with a good *résumé* of the whole subject.

Chloroform in Midwifery.

Our readers are probably well acquainted with the doctrines of Dr. Robert Lee, and with the forcible manner in which he lays them down. He appears to have little sympathy with any innovations in medicine, and those which he considers harmful he denounces with unsparing severity. The uterine sound “or poker,” the speculum, and the practice of ovariectomy have successively been the objects of his bitter condemnation. He now arraigns those doctors who venture to alleviate the sufferings of parturient women by inducing anæsthesia.

At the meeting of the Medico-Chirurgical Society of London, of Dec. 13th, he detailed seventeen cases of parturition in which chloroform was inhaled with pernicious effects. Thus, in cases 1 and 2, the contractions of the uterus were arrested by chloroform, and delivery was completed by craniotomy. In cases 3, 4, 5, 10, 14, 15 and 16, insanity and great disturbance of brain followed its use. The necessity for delivery by the forceps was attributed to its employment in cases 6, 8, 11, 12 and 13. Dangerous or fatal peritonitis or phlebitis ensued after the exhibition of chloroform in cases 7, 8, 11 and 13. Epilepsy occurred in case 14 ; and dangerous fits of syncope in case

17. The reports of friends swelled the list still further, but Dr. Lee desired to confine attention to cases which came under his own observation :

“ He thought that a contemplation of the subtle action of this poison on the nervous system would have induced caution in its application to practice, but, on the contrary, the greatest levity had characterized its employment. Very soon after the discovery of its physiological effects the author was astonished and confounded by the announcement of its application to midwifery ; and it was not difficult for him to foresee that rashness in its application and use would lead to most deplorable results, and he regretted to find that in this he had not been mistaken. It was not wonderful that women doomed to bring forth their offspring in pain and sorrow should seek to escape from the troubles of our race by means of this treacherous gift of science ; neither could we feel surprise that the instances of women who were saved from the grievous pains of child-bearing, without bad consequences, should have for a time reduced to silence those unwelcome monitors who pointed to the possible evils of this new agent ; but it did seem strange to the author that, amidst so wide-spread an experience as now existed of the noxious and dangerous effects of chloroform, it should be necessary for him to assemble the proofs of the havoc it had made. The two most serious effects produced by chloroform on women in labour were, a languid and deficient contraction of the uterus, and a greater susceptibility to the risks that arise from inflammation and fever. With regard to the first, the direct testimony of his own senses convinced him that the action of chloroform did very manifestly slacken the uterine contractions, and in some cases had put a stop to them altogether. Of the second class of effects, the risks of the puerperal condition were much complicated ; for to inflammation and fever must be added severe cerebral and nervous disorders. He had no doubt that the use of this noxious agent ought to be expelled from the practice of midwifery. In conclusion, the author observes that, though his opinions had been confirmed by conversation with the most discreet and experienced practitioners, yet he entertained grave doubts of the result of the present appeal to the good sense of the profession, when he considered the arts used to propagate a faith in this practice. It had become almost an extra-professional question. There was a systematic concealment of truth by physicians ; appeals were made to the natural timidity of woman, and the most fallacious promises of perfect safety were boldly held out. Conceited or ignorant women of fashion made a pastime of this as of other quackeries, and the cause of science and humanity was placed in the hands of the most presumptuous and frivolous part of the community, while young and inexperienced mothers were decoyed to their destruction. If he had helped to rescue the medical profession from the dominion of a great and dangerous error, and had placed some restraint on an ignominious and disgraceful practice, the author would rest satisfied that this essay had not been written in vain.”

After considerable discussion, and a remark from Mr. Fergusson that chloroform was used in a vast number of surgical cases without ill effects, Dr. Lee rose to reply.

“ He said that there was no resemblance between a surgical operation and the process of natural labour—between the expulsion of a living child from the uterus by the muscular contractions of the organ, depending upon the influence of the great nervous structures with which its walls are endowed, and the extraction of a decayed tooth from the jaw, a stone from the blad-

der, or the amputation of a limb. In natural labour, if the pains are strong and regular, women, in a vast majority of cases, are exposed to little danger, require no artificial assistance, and the function is only disturbed by interference. Mr. Fergusson had just stated that one of the principal benefits derived from chloroform in surgery is the great amount of muscular relaxation which it produces during operations. In midwifery this great amount of muscular relaxation would produce the most mischievous results; it would, in fact, induce partial or complete paralysis of the uterus, as in the case just related by Dr. Merriman. and in several of the cases detailed in the paper read that evening. A striking and fatal example of the same kind had occurred since the paper was presented to the society. Only three drachms were used in the first stage of labour, but no proper contractions followed the expulsion of the fœtus, and the uterus remained uncontracted till the death of the patient some days after in convulsions. There were no symptoms of puerperal fever or local inflammation. 'The uterus did not go down to the usual size, so much so as to give rise to the suspicion that there was another child, or some ovarian disease, but there was neither.' Dr. Snow had related to the society a case of arm presentation, where the uterus was so completely paralysed by the chloroform he exhibited, that Mr. French turned with great ease, the contractions before being so violent, that he had contemplated eviscerating the fœtus. Yet Dr. Snow affected to doubt whether chloroform and narcotic poisons impair the action of the uterus, and had expressed an opinion that in the case he (Dr. Lee) had related in the paper, the sudden cessation of the uterine contractions after its use could not be referred to it. It was impossible to reconcile such contradictions, but they admitted of a ready explanation. He lately perused a letter written by a fashionable lady soon after her confinement, to a physician, which contained the following passage:—'Chloroform à la reine, just a few drops on a handkerchief from time to time for the last hour; I found it a most indescribable alleviation, and that though never insensible.' This was a correct account, he believed, of the way in which chloroform was administered by Dr. Snow in natural labour, and it would account very satisfactorily for his assertion that the uterine contractions were little, if at all, impaired by it. Fifteen drops sprinkled upon a handkerchief, and the lady now and then permitted to sniff a little of the vapour from the corner in the last hour of labour. If he (Dr. Lee) might be allowed in plain language to characterize this proceeding, he would say that the whole was a mere pretence, and calculated only to deceive the weak, ignorant, and credulous. The anæsthesia from chloroform, of which Mr. Fergusson had spoken, and which was usually, as he understood, the result in midwifery, was quite another affair from the 'Chloroform à la reine' of Dr. Snow. Last week he saw a surgical operation performed upon a young woman to whom six drachms had been administered. Her pupils were widely dilated, the breathing stertorous; there was foaming at the mouth; the pulse was rapid and feeble, and there were convulsive twitchings of the muscles of the extremities. No man in his senses would venture to reduce a woman to such a frightful condition in natural labour. In surgery it might be considered justifiable, but in midwifery it was wholly unjustifiable. When only one drachm was given, who could be certain that it should not instantaneously be followed by the death of the person to whom it was administered? Upon this point the whole question might be allowed to hinge."

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ART. I.—*Hospital Practice ; Cases of Fever.* By GEORGE S. UPSHUR, A. M., M. D., Surgeon to the U. S. Marine Hospital, Norfolk, &c., &c.

CASE I.—James Reid, captain, from Maine, 22 years old, single, dark hair and eyes, and very robust, entered on 14th April 1853. His vessel had been trading, for some months before, between Boston and the ports of North and South Carolina. He was taken sick on 8th of April at sea ; I could not learn exactly how, as the patient was very delirious from the commencement, and so furious and unmanageable that the mate was forced to lock him up in the cabin to save himself and crew from his violence. As soon as the vessel dropped anchor, I was requested to visit him on board. He was comparatively quiet, but far from being rational, and it was with great difficulty I could persuade him to permit himself to be carried to the hospital.

Upon my arrival at the hospital, an hour afterwards, I found Capt. Reid, the steward, and one of his crew standing in the yard. The steward told me he had put the patient to bed, without much resistance, and left him tolerably quiet, but he had scarcely quit the ward ten minutes, before Reid dressed himself, went down stairs, and declared he would go on board his vessel—stated that he was in the harbour of Savannah, and that the steward had been trying to put him in jail to punish him. Every attempt to force him back into the hospital was violently resisted, but after a good deal of persuasion he agreed to return to the ward and go to bed. As soon as he became composed I proceeded to examine his case. He was averse to answering questions, was sullen and moody—cheeks flushed—eye dull, but pupil contracted—pulse only 60, full, but not very resisting—tongue heavily coated—breath offensive—bowels constipated—countenance without expression—skin dry and muddy—head and back ache. The mate informed me *that he was more rational in the morning. As the afternoon came*

on he became restless and was disposed to rave, and at last fell into a semi-comatose state, in which he breathed heavily and groaned a good deal. He had no nausea, nor abdominal tenderness—but was very thirsty, desiring cold drinks exclusively.

I tied up his arm and opened a vein; he did not lose more than six ounces of blood however, before he became faint, and I desisted. As the patient was unconscious of what was going on, the faintness was not of mental origin. Ordered calomel and jalap each gr. x., immediately; and sinapisms to the nucha and extremities. Towards evening he became very drowsy, with a decided increase of fever. The steward thought this state was preceded by chilliness.

15th. Passed a tolerably quiet night; bowels freely moved; pulse 75, soft; skin very dry; less thirst; tongue unaltered; countenance more life-like; less head ache; does not remember when he entered the hospital, and insists that he is still in Savannah; no appetite. Ordered gr. xx. of sulphate of quinia to be taken immediately; and gr. x. two hours afterwards.

16th. Had a very slight paroxysm yesterday afternoon; slept soundly all night, with a moist skin, and no thirst. This morning is quite rational; wants to know how long he has been sick, and wishes to go on board his vessel; appetite returning; tongue nearly clean; pulse natural; no ringing in the ears. Ordered gr. x. more of quinine.

On 17th he was entirely well; and his whole deportment so changed that no one would have recognised in him the stupid, sullen patient of the 14th. He was discharged on 18th perfectly restored, and went to sea next day.

This case but adds another to the long list of illustrations of the variety of forms which miasmatic fever is in the habit of assuming. Making every local affection, with which it happens to be associated, wear its livery, and often simulating some local disease when there is really none in existence, it becomes, indeed, an *ignis fatuus* to mislead and deceive. In this case the patient seemed to be labouring under serious disease of the brain, and judging from the most prominent symptoms, one would have felt certain of his ability to bear the free use of antiphlogistic remedies; and yet he fainted at the loss of only six ounces of blood; and was at last entirely and speedily relieved by heroic doses of the so-called cerebral excitant, quinine. There is much food for reflection, in cases like this, for those who are morbidly afraid of this remedy whenever the head is at all affected; particularly if there be a *slow pulse* and a *contracted pupil*. In the miasmatic regions of the South, however, these dogmas of the schoolmen are fast giving way to a rational experience based upon proper views of the causes of disease.

CASE II.—John Collins, æt. 23, from Massachusetts, slender frame, light hair, blue eyes, single, was admitted June 18th. Had been trading to North Carolina, and two days before was seized with chill, accompanied by fever, thirst, and general aching. Says the fever has not left him since he was taken, but thinks there is a decided amelioration of the symptoms every morning for two or three hours. Tongue coated yellow, skin dry but not very warm, bowels open, no appetite, thirst, aching of head and limbs; pulse 110, compressible and small; no nausea nor abdominal tenderness. R. Quiniæ sulph., gr. xx.; Vin. Quassiæ, ℥iv.; Elix. Vitriol, ℥ij. M. S. Two teaspoonfuls 3 times a-day; and ten grains of blue mass at bedtime.

On 19th he was nearly free from fever, with a little appetite and less thirst. The medicine was continued, and he was discharged cured on 22d.

CASE III.—McDonald, æt. 27, from N. Carolina, where he had been trading, dark hair, hazel eyes, single, very muscular, was admitted July 14th, with well marked quotidian intermittent. At the morning visit found him with flushed face, full pulse, aching head, thirst, and great restlessness; no abdominal tenderness; bowels open. R. Quiniæ sulph., gr. xv.; Ft. Chart. iii. S. One powder every two hours.

15th. Feels better; had a chill this morning, followed by less fever than usual; skin is moist; pulse 96, soft; very little aching; no appetite. R. Quiniæ sulph., gr. vi.; Pulv. ipecac, gr. iij. M. Pil. iii. S. One pill every two hours.

He missed the paroxysm entirely next morning, when the quinine was discontinued and the wine of quassia ordered, two ounces *ter die*. His appetite returned rapidly, and he was discharged cured on 20th of July. The quinine was administered in this case—5 grs. every two hours—during the height of the hot stage, with decided benefit.

CASE IV.—Henry Jones, æt. 20, Irishman, single, dark hair and eyes, stout—four years in this country, and has recently been trading up the Roanoke river, admitted August 18th. Was seized on 18th, after exposure to rain, with chill, followed by fever and general aching; cough came on at the same time; has had more or less fever, with urgent cough, since his seizure; says he feels worse every day about 12 o'clock; that is, his thirst increases, and his head, back and limbs begin to ache more violently; tongue heavily coated yellow; face red, pupils contracted; thirst urgent; nausea; and hot, dry skin; no abdominal tenderness; bowels constipated; complete anorexia. Physical exploration of the chest gave clear percussion throughout both lungs, and normal respiration except a little harshness of sound, approaching sonorous râle, about the centre of both lungs posteriorly. The expectoration was scanty, and consisted of only glairy mucous.

I ordered calomel and jalap, of each ten grains, and if the bowels were moved by bedtime, ten grains of quinine, at one dose, regardless of fever. The visit to-day was paid at 11 o'clock, A. M.

19th. Feels better; bowels moved twice; exacerbation came on yesterday at 1 o'clock, P. M.; fever very intense; bilious vomiting; thirst; and general aching; cough was very troublesome during the intensity of the fever; took the ten grains of quinine last night and ten grains more early this morning. Found him at 11, A. M., with a small, feeble pulse, cool skin, and decided deafness, with singing in the ears; tongue clean; perspiration; no pain; slight appetite; little or no cough; no medicine.

20th. Missed the paroxysm yesterday; no fever, and only a slight aching of the limbs. Ordered *ziii*. Tr. Cinchon. *c.* 3 times a-day. On the 21st the patient was entirely well, and would have been discharged but for a chronic gonorrhœa, for which he remained to be treated.

CASE V.—Robert Carson, æt. 20, North Carolina, hazel eyes, dark hair, sanguineous lymphatic temperament, entered August 30th. Has been trading between Baltimore and Plymouth, N. C., and was seized 27th with chill, followed by fever, which declined without perspiration; has had a paroxysm every day since, and taken no medicine except a purgative on 28th. Saw him at 7, P. M.; fever high but abating, with some tendency to sweat; pulse full, hard, 120; skin hot; thirst; anorexia; nausea, but no abdominal pain; head, back and limbs aching; tongue coated white, slick and sore. Ordered ten grains of quinine at 9, P. M., and the dose to be repeated in the morning.

31st. Fever declined about 9 o'clock last night; has perspired freely since midnight; bowels not moved; no nausea; pulse 80, soft and natural; no aching nor thirst; tongue as yesterday; skin cool and very pale; intellect very dull, but perfectly rational; countenance listless; no appetite; ordered five grains of quinine at bed time; until then no medicine. Repeat the dose in the morning.

Sept. 1st. No alteration; ordered two ounces of wine of quassia thrice daily, and three compound cathartic pills at bedtime. The patient did not have another paroxysm, and was discharged cured on the 6th of September.

The cases of Jones and Carson illustrate very well the sedative effect of large doses of quinine in some forms of miasmatic fever.

CASE VI.—Andrew Daly, æt. 21, blue eyes, light hair, lymphatic temperament, single, entered September 2d. Has been trading between Boston and Savannah, and was seized August 27th with chill, followed by fever and sweating. The paroxysm has recurred every afternoon at the same hour; bowels confined; tongue clean and moist; no appetite; no fever. Ordered fifteen grains of quinine at once, and five grains early to-morrow morning. Calomel and jalap at bedtime.

Sept. 3d. Missed the paroxysm yesterday afternoon, is entirely free from fever to-day, and fairly convalescent. Discharged on 7th, having remained until then to be treated for gonorrhœa.

CASE VII.—J. W. Hall, captain, æt. 27, Maine, single, blue eyes, light hair, lymphatic temperament, entered September 5th. Is last from Georgetown, S. C., 14 miles up a fresh water river, seized Aug. 28th with headache and backache, and next morning had a distinctly marked chill and fever; thinks he has had no chill since, but fever every day. *Present condition*: Face flushed, eyes injected, yellowish tinge of skin and conjunctiva; very thirsty; restless; tongue coated white, clammy and cracked; no pain except in head; pulse 75, feeble; skin moist and perspirable; anorexia; intellect clear; countenance distressed; bowels very costive.

When about to prescribe for him, he said, "Doctor, I have one request to make; do not give me any quinine." We said, "Why, captain?" He replied, "Because last year I had this same form of fever, contracted in the same locality, was treated with quinine in a Northern hospital, and my head was near bursting from its effects." "How much did you take," we asked. "Ten grains in 48 hours," he answered. We only remarked, "Never mind, captain, we will not hurt you," and prescribed as follows: R. Pulv. jal. et. hyd. chlor. mit., aa., gr. x. M. To be taken immediately. As soon as the bowels are moved give one of the following pills every two hours:—R. Quiniæ sulph., gr. xx., pil. vj. Ice water as freely as he desires it.

Sept. 6th. Rested well last night, and feels more comfortable than since he was seized; thirst nearly gone; no headache; bowels moved twice; skin moist and natural in temperature; pulse 75, compressible; has taken 4 pills; neck and shoulders covered with sudamina; continue pills.

Sept. 7th. No fever; no pain; all the functions regularly performed; appetite returning. R. Tinc. cinchon. comp., ʒij., *ter die*, and three comp. cath. pills at bedtime, when the bowels are disposed to be torpid. From this time he gained his strength rapidly, and left the hospital well on 12th. He remarked as he took leave of me, "Ah! Doctor, if you had given me *quinine*, I should still have been in my bed."

CASE VIII.—Daniel Smith, mate, æt. 38, Pennsylvania, married, dark hair, blue eyes and quite robust, entered on 5th of September, from the same vessel as Capt. Hall, and was taken sick on the same day, with well marked chill and fever, aching of limbs, &c. Has had no chill since, but the fever has continued with only a short remission every morning. His bowels have been kept open with epsom salts, but, with this exception, he has taken no medicine. When he entered his head was aching violently; tongue clean and very dry; bowels open; pains in back and limbs; great thirst; face flushed; pulse 110, full; anorexia; skin hot, but moist; drowsy and listless. Ordered ten grains of quinine at once, and a repetition of the dose four hours after. Ice and ice water freely.

At the next visit, on 6th, found him entirely free from fever, with no thirst nor pain, appetite returning, and indeed convalescence fairly

established. He took no more medicine, and was discharged cured on 12th of September.

CASE IX.—William Pool, æt. 24, Michigan, black hair and eyes, bilious temperament, from some vessel, entered same day; seized Aug. 29th with headache and fever; has had fever ever since; took a simple emetic at first, and subsequently a dose of epsom salts. *Present condition*: Headache; thirst; pains in limbs and back; bowels constipated; anorexia; slight epigastric tenderness on pressure; no nausea; skin hot and dry; pulse small, 120; face flushed and eyes injected. Calomel and jalap at once; ten grains of quinine at 4, P. M.; repeated at 9, P. M. Ice freely.

Sept. 6th. Rested very badly last night, having vomited a good deal. The steward thinks he did not retain either dose of the quinine. Bowels moved once; less thirst; flushed face; nausea; aching of head and limbs; no appetite; tongue dry, smooth and red; pulse 100, and undulating; skin soft and perspirable; an abundant crop of sudamina covers the neck and shoulders. R. Quiniæ sulph., gr. xx. Ft. pil. iv. S. One pill every two hours.

Sept. 7th. Has improved a little; took all the pills, and retained them; face less flushed; pulse 75, natural; no appetite; slept badly; less aching; no movement of the bowels. R. Quiniæ sulph., gr. xvi.; Mass. hyd., gr. xv.; Pulv. digitalis, gr. ij. M. Ft. pil. viij. S. One pill every two hours; continue cold drinks.

Sept. 8th. Convalescing; no fever nor thirst; appetite returning; tongue clean and natural; no medicine. Patient continued to improve, and was discharged cured on the 14th.

CASE X.—Henry Ryan, æt. 17, New York, hazel eyes and dark hair, single, delicate looking, from the same vessel, and entered the same day. He was seized on 28th August with fever and general aching of head and limbs; has had fever ever since, and is worse at night. *Present condition*: Respiration hurried; skin very dry and cool; no headache; pulse 130, rather full; thirst; bowels constipated; listless and prostrated. Ordered a drachm and a half of powdered jalap at once and ten grains of quinine; repeat the quinine at 9, P. M. Cold drinks in abundance.

Sept. 6th. Says he slept none last night, but his countenance is brighter; bowels yet unmoved; pulse full, 96; skin moist; neck and shoulders covered with sudamina. R. Hyd. chlor. mit., gr. viij.; Pulv. jalap, gr. x. M. To be given immediately. Ten grains of quinine at 2, P. M. If very restless after the bowels are moved, give fifteen grains of Dover's powder at bedtime.

Sept. 7th. Took the Dover's powder, and slept soundly all night; pulse 80, natural; perspiration; no appetite; tongue clean and clammy; less thirst; bowels moved freely. R. Quiniæ sulph., gr. xx.; Morph. sulph., gr. $\frac{1}{2}$; Mass. hyd., gr. xv. M. Ft. pil. viij. S. One pill every two hours.

Sept. 8th. Cannot sleep; no fever; pulse 75; tongue clean; no

thirst; slight headache; bowels confined; skin pleasant; profuse epistaxis this morning. Ordered three comp. cath. pills to be given at once.

From this time the patient steadily convalesced, although much more slowly than his shipmates had done, and he was discharged cured on the 24th.

CASE XI.—Robert Muir, æt. 23, Massachusetts, single, blue eyes, sandy hair, and sanguineous temperament, from the same vessel, and entered on the same day. Seized Sept. 1st with chill, followed by fever; has had fever ever since. He has taken epsom salts and two doses of calomel and jalap. When he entered his tongue was heavily coated yellow; pulse 100, full; headache; flushed face; rapid respiration; thirst; hot, moist skin, and bowels excessively confined. Ordered ten grains each of calomel and jalap at once; and fifteen grains of quinine at 8, P. M. Cold drinks.

Sept. 6th. Entirely free from fever, and, except prostration, seems to be quite well. He was ordered ten grains of quinine in two powders.

After this he took no more medicine, and was discharged cured on 14th.

CASE XII.—Rodriguez, Portuguese, æt. 30, black hair and eyes, swarthy complexion, from same vessel, entered Sept. 7th. Was seized on 5th with chill, fever and nausea; has had no chill since, but constant fever with a remission every morning. Tongue clean and dry; thirst; no appetite; pulse 110, full and resisting; some vomiting; bowels open; head, back and limbs ache; skin hot and dry. R. Quiniæ sulph., gr. xx.; Pulv. digitalis, gr. i. M. Ft. pil. iv. S. One pill every two hours.

Sept. 8th. Free from fever; no nausea; skin moist, and of natural temperature; bowels not moved since yesterday; no aching; took all the pills. R. Quiniæ sulph., gr. xv. Ft. pil. vj. S. One pill every two hours.

Sept. 9th. Did not sleep last night, and steward thinks he had some fever; none this morning; bowels constipated; slight ringing in the ears; tongue red and pointed; a little epigastric tenderness. Discontinue quinine. R. Mass. hyd., gr. xv.; Pulv. rhei., gr. x.; Morph. sulph., gr. ʒ. M. Ft. pil. vj. S. One pill every two hours.

On the next day found the patient with some appetite, and fairly convalescing. He was discharged on the 14th.

The last six cases very well illustrate the modifying influence of temperament and constitutional power in the progress of disease. Six persons were all exposed at the same time, and under similar circumstances, to the morbid cause, and all undoubtedly had the same type of disease, and yet no two of them were affected precisely alike. In

three of them sudamina were abundant; two had epigastric tenderness and a great deal of nausea; while one, although suffering from intense headache, with a flushed face and injected eye, had a pulse of only 75; and a moist, natural skin.

CASE XIII.—William Vaughan, New York, æt. 27, hazel eyes, brown hair, sanguineous temperament, single, entered Sept. 12th. Was seized on 8th while in Wilmington, N. C., with chill, followed by fever and prostration; has had a chill every day since. Saw him in the evening; skin was hot; pulse 120, full; eyes injected; intense headache; slight nausea; great thirst and restlessness; had been well purged with calomel. R. Quiniæ sulph, gr. xxx; Ft. chart., iij. S. One powder every three hours.

Sept. 13th. Feels somewhat better, but is nauseated and very thirsty; vomited during the night, and thinks he threw up some of the powders; less fever than yesterday, and skin perspirable; no appetite; bowels moved once. R. Quiniæ sulph., gr. xx. Ft. pil. vj. S. One every two hours; ten grains of calomel at bedtime.

Sept. 14th. Slept well; feels relieved; no fever nor aching; continue pills.

He had no return of fever, and was discharged on the 21st of September, entirely cured.

CASE XIV.—Henry Wise, Pennsylvania, æt. 16, lymphatic temperament, entered September 12th; had been trading up James river, and was seized on 4th, after bathing, with chill followed by fever; has had a chill every day since. When he entered, was prostrated; extremely pallid; lips bloodless; extremities cool; skin shriveled; intellect very dull; pulse 130, small and feeble; respiration hurried and oppressed; bowels loose; very thirsty; tongue dry; no abdominal tenderness. Ordered brandy toddy; sinapisms to stomach and extremities; hot bricks to the feet and warm covering. R. Quiniæ sulph., gr. xl.; Ft. chart., viij. S. Two powders at once, and one every three hours afterwards.

Sept. 13th. Was very quiet during the night; less pallor, and pulse stronger; skin moderately warm; very thirsty; no pain; intellect still dull; tongue dry and sleek. R. Quiniæ sulph., gr. xx.; Mass. hydrarg., gr. xij. M. Ft. pil. viij. S. One pill every two hours; cold drinks and ice. The bowels not having been moved at bedtime, ordered ten grains of calomel.

Sept. 14th. No sleep last night; mind very dull; face pallid; pulse full, 112; tongue coated dark, dry, and when protruded, he is indisposed to draw it in; lips dry, sore and cracked, with sordes on teeth; no subsultus; is perfectly rational when aroused; bowels moved by calomel; no nausea nor any complaint of pain; thirst continues. R. Hydrarg., viij.; Chlor. mit., gr. viij.; Quiniæ sulph., gr. xv. M. Ft. pulv. viij. S. One every two hours. Apply a blister, 4x6, to abdomen. Cold drinks.

Evening.—No better; swallows with difficulty. Ordered twenty grains of quinine with forty drops of laudanum in an enema at 8, P. M.; to be repeated at daybreak.

Sept. 15th. Injection last night was not retained nor repeated; bowels moved twice copiously, and four lumbrici in the stools; protrudes his tongue when desired, but answers no questions; lies with eyes half open; pupils natural; pulse 132, feeble; skin warm, dry and straw coloured; respiration rapid and irregular; very thirsty and restless; the blister drew well; surface white and disposed to be dry; continue treatment; and give brandy toddy and soup.

Evening.—Swallows better; takes his medicine without difficulty; pulse 140; ate a little soup at dinner time; bowels disposed to be loose; other symptoms as at morning visit; continue treatment.

Sept. 16th. No better; decubitus dorsal; countenance sunken and very pale; respiration sighing and irregular; bowels not moved since last visit; has been unable to swallow all night. Blister to nucha.

In the evening the symptoms had not improved. Ordered blisters to the ankles and wrists.

Sept. 17th. Rather more conscious; blisters drew well, and he complains of them; pulse 130; skin warm; tongue unaltered; bowels not moved; breathing better; countenance more expressive; urinary secretion abundant; swallows with more ease. R. Tinct. cinchon. comp., ʒij.; Pulveris camph., gr. xvj.; Quiniæ sulph., gr. xij.; Mass. hydrarg., gr. xx. M. S. A teaspoonful every hour. Milk, or any other nourishment he may desire.

Evening.—Seems to be improving; continue treatment.

Sept. 18th.—Is apparently better; quite rational; protrudes his tongue when requested; it is dry, black and cracked; pulse less frequent, 110, and stronger; no heat of skin; bowels confined; swallows with ease; blisters begin to look red. Continue treatment.

Evening.—Had a copious stool at 4, P. M., containing two lumbrici; no change in his symptoms. Continue treatment.

Sept. 19th.—Not so well; drowsy and difficult to arouse; sweating profusely; answers no questions; continued to sink, and expired at 5, P. M. No autopsy.

If this patient had been treated early, or had possessed the constitutional power of Smith, in Case 8, he would doubtless have survived the attack.

CASE XV.—William Hudson, æt. 22, was brought to the hospital in a comatose condition on the evening of 12th September. The captain of his vessel informed me, that on the 10th, in the morning, he had a slight chill, followed by fever and sweating, and was sitting up in the afternoon. Next day, 11th, he had another attack at the same hour, but was more drowsy during the cold stage, and had more fever afterwards, but was sitting up in the evening as on the first day. On the morning of the 12th the chill came on earlier, and in an hour or

two it was difficult to arouse him. The vessel was lying in Hampton roads, and the nearest physician sent for. On his arrival he found the patient very drowsy, but able to swallow. Learning the history of the case, he decided that the head was too much involved to administer quinine; applied a blister to the nucha, and took his leave.

When the patient entered the hospital his pulse was only 72, and very feeble; skin moist; face flushed; pupils moveable; respiration a little laboured; not stertorous. Ordered ice to his head, mustard to the extremities, a stimulating enema, and hot pediluvium. As soon as the enema was done acting, I administered forty grains quinine *per anum*; and ordered five grains to be given every hour as soon as he could swallow.

Sept. 13th.—Bowels freely moved by enema; the quinine injection was retained only a few minutes; was perfectly comatose and unable to swallow all night. At the morning visit found him perfectly insensible, very pallid, and evidently dying. He expired at 1 o'clock, P. M., eighteen hours after his admission. No autopsy.

This patient died of “pernicious” intermittent, and was sacrificed to the dogma, that “if there are any head symptoms, in miasmatic fever, quinine is poison.” If the physician, who saw him early on the morning of the day he entered the hospital, and was made acquainted with the antecedents in his case, had ordered him to take ten grains of quinine every hour until he should have taken a drachm, I am as well satisfied that he would have recovered as I am that he is now dead.

CASE XVI.—R. H. McCready, Maryland, æt. 19, blue eyes, dark hair and sanguineous temperament, entered Sept. 14th. Has been trading up the Delaware river, and was seized on 5th with chill, fever, aching, &c.; paroxysm has recurred every other day since at the same hour; has taken no medicine except copaiva for gonorrhœa, which he has had for a month. He had no fever when he entered, but great tenderness over the abdomen upon pressure; bowels regular; tongue clean, red and pointed; no appetite; thirst; a general feeling of languor; no nausea. R. Quiniæ sulph., gr. xx. Ft. pil. vi. S. One pill every two hours; sinapism to abdomen.

Sept. 15th. Has had three loose and slimy stools since yesterday; there is no fever, no headache; a little appetite; no medicine.

Sept. 16th. Does not feel so well; had a paroxysm last night; skin moist, but hot; abdominal tenderness; tongue still red and pointed; headache; pulse 110, sharp and resisting; very thirsty; bowels not moved. R. Mass. hydrarg., gr. xv.; Quiniæ sulph., gr. xij. M. Ft. pil. vi. S. One pill every two hours.

Sept. 17th. Free from fever; slept a little better than usual last night; tongue furred white; pulse 84, compressible and small; bowels regular; moved by the pills of yesterday; thirst and anorexia continue; no medicine.

Sept. 18th. Another paroxysm to-day and all the symptoms aggravated, except the abdominal tenderness, which is less. A drachm of sweet spirits of nitre every two hours; ice freely.

Sept. 19th. Better; no fever; appetite returning; bowels open; entire freedom from pain; continue treatment.

On the 20th the patient was able to sit up a little, and was discharged on 24th cured.

CASE XVII.—J. Haws, Maine, æt. 24, dark hair and eyes, single, and remarkable stout, without obesity; will weigh at least 220 lbs.; entered October 7th. Has been trading to Alexandria, and was seized with chill on 4th; paroxysms recur every other day; had a chill on him when he entered; pale and shivering; with nausea, thirst and general aching. Reaction came on in the course of two hours; when the face grew red, the carotids throbbed, and the skin became intensely hot; pulse 120, full and resisting; great restlessness and nausea; bowels constipated. Ordered face, head and neck to be sponged with cold water; iced drinks freely, and four comp. cath. pills immediately. A pill of four grains of sulphate of quinine every two hours, beginning as soon as the bowels are moved, regardless of the fever.

Oct. 8th. Has taken six pills and says he feels entirely relieved; no fever; a little appetite; bowels open. R. Tinct. cinchon. comp., ʒj.; Quiniæ sulph., gr. x.; Elix. vitriol, gtt. xx. M. S. A teaspoonful every two hours.

He missed the paroxysm on the next day, and was discharged cured on the 11th.

CASE XVIII.—J. D. Mitchell, Maine, æt. 21, blue eyes and brown hair, single, from the same vessel, entered the same day, Oct. 7th. Was seized Sept. 28th with headache and fever; no chill; paroxysm recurs every day, but is more severe every other day; bowels regular; pulse small, 110; nausea; thirst and aching. R. Quiniæ sulph., gr. xx. Ft. pil. vi. S. One pill every two hours; cold drinks.

Oct. 8th. Better; no fever and no tendency to a paroxysm; took all the pills; no appetite; no medicine. Continued to convalesce, and was discharged with Haws on 11th.

In perusing the foregoing observations, which are taken indiscriminately from a large number of cases of miasmatic fever admitted into the hospital during the last summer, two things will strike the attention; the exhibition of quinine in large doses, regardless of the stage of the disease, and always with benefit, and the small quantity of the mercurial preparations prescribed. If the bowels were constipated, and the condition of the patient was such that he could afford to run the risk of another paroxysm, the treatment was usually commenced with a mercurial cathartic, of which there is none better than calomel and jalap, in Dr. Rush's old dose of "ten and ten." As a general

rule, however, the so called preparatory treatment, in uncomplicated miasmatic fever, is unnecessary, and usually entails a loss of time which frequently can ill be spared.

I am no advocate for the doctrine that *quinine is a sedative*, as that doctrine is promulgated and insisted upon by some quinine enthusiasts. As I have said elsewhere, it is, undoubtedly, a sedative, but not in the same sense that *digitalis* is a sedative. It may be given during the height of the febrile paroxysm, but not if the fever is the result of pneumonia or arachnitis; and he who would give quinine in these diseases to reduce the pulse, because he had seen it produce such an effect in remittent fever, would commit a great blunder. The truth is, quinine is a medicine *sui generis*, and its impression upon the system, like that of many other remedies, varies with the condition of the patient and the cause of his disease. Administered in large doses to a healthy person, it undoubtedly quickens the pulse, flushes the face, and brightens the eye, and so far it may be ranked as a stimulant. Furthermore, I believe, nay, I *know*, that in inflammatory affections of the brain and its membranes, quinine is decidedly excitant, and, given in large or small doses, will increase the head symptoms *invariably*. This knowledge of the effect produced by quinine upon the healthy and inflamed brain, has, unfortunately led to a timid use, or almost entire abandonment, of the agent in all cases where the head is affected. And in this consists the error of those who refuse to give it in miasmatic fever where there is even the slightest tendency to the brain. Inflammation of the brain is a very rare complication in this fever, while drowsiness, coma, and even convulsions, are frequently its accompaniments. There is a vast difference, however, between *these* symptoms and *inflammation*; and large doses of quinine will be found the best treatment for them.

Many a valuable life has been sacrificed, because the drowsiness or stupor, occurring in a paroxysm of intermittent, was mistaken for inflammatory action. During the last summer I received a letter from an intelligent physician in North Carolina, formerly a student in my office, in which he remarked, that in almost all the cases of miasmatic fever he had seen, particularly among children, the brain was chiefly involved, and became so very early in the attack; that for this reason he dared not administer quinine, and he had lost a large majority of his cases. In my reply, I laid down this rule for his guidance: "In the bilious fever of your section, rely chiefly upon quinine, regardless

of the stage of the disease, and without reference to the head symptoms; use the remedy freely and always in proportion to the gravity of the cerebral symptoms; the only exception which I know to this rule is where you have *active delirium*; drowsiness, stupor or coma, should be no bar to the free use of quinine; and if the patient cannot swallow, administer it by enema or by the skin." A few weeks after my reply, he wrote me that he had carried out my practice to the letter, and had lost no patient since.

If there is much irritation of the stomach and bowels, with diarrhoea, and a very dry tongue, quinine does not act well; and should these symptoms be accompanied by delirium, I am satisfied it does positive harm. In such cases, I rely more upon blisters, mercurials, and the free use of ice.

When quinine is administered during the height of the fever, it is often of advantage to combine with it digitalis or sweet spirits of nitre, and should the bowels be confined, as is usually the case, the impression of the remedy will be found more certain and more permanent, if its use is preceded by an active cathartic.

My experience leads me to the conclusion, that a single large dose of quinine is more certain to prevent the recurrence of the paroxysm than the same quantity given in small doses; but unless the one dose is followed by doses of one or two grains three or four times a day for a few days, the patient is more apt to relapse than if he had been cured, in the first instance, by small doses frequently repeated.

ART. II.—*The Vaccine Law of the Virginia Code.* By A. E. PETICOLAS, M. D., Demonstrator of Anatomy in the Richmond Medical College, Vaccine Agent for Eastern Virginia, etc.

The recent occurrence of several cases of small pox in our own city and in Charlottesville, with the consequent alarm to the inhabitants of these places and their environs, affords a favourable opportunity for offering some remarks regarding the Virginia vaccine law. The imperfections of this ordinance have long been experienced by the people and by successive vaccine agents. Both have suffered from the impracticability of its provisions; and the former have been too often in-

clined to attribute the frequent disappointments of their expectations to some want of zeal or loyalty on the part of the latter. Even physicians whose professional education might necessarily be supposed to entail a full knowledge of the sources, nature, and properties of vaccine virus, exhibit from time to time a most unbecoming want of forbearance, and, we regret to say, a most lamentable ignorance occasionally in the latitudinous commissions and unwarrantable commands with which they are pleased to honour the vaccine agent.

These inconveniences form by no means the only, or even the chief argument, in favour of an alteration in our vaccine regulations. In former years when the interior of the State held but little immediate intercourse with the inhabitants of the cities, the chances of the introduction of small pox to the more remote districts were but small. In a country naturally healthy, with a sparse, cleanly, and frugal population, the spontaneous production of this disease might be accounted an impossibility; and the people with a temerity engendered by long seasons of undisturbed health, have come to look upon vaccination as a protection of occasional necessity alone. Many through example, or want of faith; many through absolute negligence and despite of fair warning, were, and even are, permitted to attain adult age without shielding their system with the innocent vaccine disease against the dreadful ravages of the more malignant variola; the probability of the latter ever making its appearance in our salubrious districts being confidently looked upon as infinitely small.

Now, however, a great change is to be observed in the facilities for the importation of the malady, and now the former disinclination to suffer from cow pox is, under the immediate stimulus of fear, frequently converted into the most frantic entreaties, the most earnest solicitations and the most imperious demands upon the officer required by law to furnish the means of protection. The construction of an intricate network of internal improvement, on which are employed emigrant workmen, the actual operation of many great lines of travel which traverse the centre of heretofore unfrequented districts, afford a ready means for the infection of a population whose long enjoyed immunity has made it negligent of the proper mode of defence. A traveller stops in a remote village, or a workman from New York arrives at a station house; the term of incubation expires, and these individuals, after free communication with the healthy unvaccinated residents, are ascertained to have small pox.

The effects of this discovery are obvious : a panic arises ; the neglected prophylactic of Jenner is at last thought of, and the whole community are eager to avail themselves of its benefits. They turn to the "vaccine law," and then besiege the vaccine agent with clamorous zeal.

The eagerness of the unprofessional to be inoculated with cow pox, is only equalled by the ardour of the professional gentlemen to perform that operation. As the agent is expected to supply the means for the gratification of the wishes of both parties, he enjoys no very enviable situation.

To render more evident the troubles which ensue from the above described accidents, we shall place before our readers the essence of the vaccine law. And though addressing physicians, we shall not hesitate to advert to certain facts concerning the nature, sources and difficulties of obtaining vaccine virus. For some of our brethren, in the multitude of their avocations, are completely oblivious on these points, and by forgetting them, they bring the agent into discredit.

The vaccine law requires the governor of Virginia to make a yearly contract with a physician, under the provisions of which contract the doctor is required to furnish, free of charge, genuine vaccine virus to *all* who apply for it. In case the governor is satisfied of the faithful performance of the agent's duties, he pays the latter \$ 500.

The idea of contracting for vaccine virus as if it were pig-iron, pork, peas, or some other article the supply of which is proportioned to the activity, industry or ingenuity of the contracting party, is sufficiently novel. And, surely, when it is remembered that vaccine matter can ordinarily be obtained in but one way—by the vaccination of healthy subjects—and that such patients can at farthest yield but one or two scabs during a lifetime, it is quite plain that the most extensive practice of any single physician, be he who he may, must be far from adequate to afford a supply of virus equal to the demands of a State whose population is one and a half millions. To this the ignorant might object, and do urge that the demand is not continuous, and that during the intervals a store of matter may be collected for seasons of need. This reasoning, apparently so plausible, is unfortunately without foundation. Unfortunately for those who use the argument, and unfortunately for the agent, vaccine matter *will not* keep. It can under no circumstances known to the writer be expected to retain its powers of reproduction for more than a few weeks. And no agent

could distribute matter with the honest belief of its giving satisfaction more than four or five weeks after its removal from the arm. The folly of laying up virus for future use with this fact fully before our eyes is apparent enough. We know there are those who will contest this assertion. It has been our lot to hear of many instances where vaccine scabs or vaccine lymph was kept intact in air tight bottles and tubes, on points and quills, and in other modes too various to enumerate, for several months. Such perhaps may be true. Indeed the character of the narrators would preclude any doubt of their veracity; but at the same time it is proper to state that these are exceptions to the rule; and that the conclusions of the writer are supported by others who have enjoyed ample opportunity for testing all the proposed methods for preserving the germs of cow pox. Is there any known remedy for the difficulty here announced? Shall it be advised to retain patients in an unprotected condition under our eye ready for the day when virus is needed at a distance? Even if possible, or proper, this shift would be of no avail. When small pox appears in an unprotected country, every hour is of the utmost importance, every delay is fraught with hazard. Applicants for virus are always in a hurry; "please send matter by return mail," is the oft repeated injunction; while it requires fifteen to twenty-one days after the insertion of matter before the detachment of the scab from the arm.

It has just been shown that the number of applicants must always be great, while the means of getting matter must ever be small; that the number of patients falling to the share of any one physician is limited, that virus is a corruptible material, and that the time necessary for its elaboration to the state when it can be transmitted with least fear of decomposition, is sufficient to ensure the wide extension of variolous infection. With these data, the absurdity of legal requisitions on the agent becomes too glaring to be ignored. One man by his individual exertion is required to comply with the possible and unlimited demands of a million and a half of men for a perishable animal product, which it takes at least fifteen days to produce: and which, assuming that the solitary individual worked twenty-four hours *per diem*, he could not find the means of producing in sufficient plenty under any combination of probable circumstances. In other words, the law requires the vaccine agent to perform an indefinite number of miracles under penalty of forfeiting a moderate salary of \$500 *per annum*. It requires no argumentation to prove the impracticability of

so unnatural a scheme, and it only remains to the agent to call to his assistance the aid of others in striving to effect what his individual exertions can in no manner pretend to compass. The more friendly of his brother practitioners may charitably aid him in the performance of his task, but it needs a more numerous host of co-operators than the majority can command to supply the incontinent requisitions of a people panic struck by small pox. A last resource alone remains—that is, the effect of the almighty dollar. In the northern cities, where a dense population affords a more rapid increase in the extent of soil on which to plant the virus, matter must be bought to satisfy the cravings of an alarmed populace, and can only be purchased at high prices. At the North, scabs cost from \$1.50 to \$5 each.

But the law while it makes no provision for contingencies makes *no limit* to the duties of the agent. The law permits *all* to demand, and requires all demands to be acceded to. It prescribes *no measure* of the quantity to be given, but is specially careful in defining remuneration of its officer. He shall have five hundred dollars, provided always the governor is convinced of his faithfulness. His duties according to this same law necessitating the possible incurrence of an expense double the sum of what is given as reward for seasons of unceasing toil, vexation, and even of insult; if that can be called insult which is the offspring of ignorance and ill manners. It is no uncommon thing for one applicant to ask for five or six scabs, nor is it so very rare for them to abuse in round terms a refusal of compliance with such exorbitant desires. Here then is a statute which places its executive officer in the power and subjects him to the boundless demands of the most uncivilized boor; gives him protection of no kind whatsoever, and rewards him with the surplus of five hundred dollars, which he is graciously permitted to expend for public benefit; counting his labour and anxiety, beside the knowledge required for the proper performance of his duties, as worthy of no reward.

In all humility we enquire if such a regulation can be the result of a cool, deliberate and enlarged view concerning the nature of the material legislated about? It is to be presumed that the *intention* was to extend vaccine protection through the State and to check the devastations of variola.

Those who framed the statute forgot apparently that their intentions might reach beyond the means provided for their fulfilment. It is cer-

tainly quite patriotic to desire to protect the State from epidemic visitation, but unless the power applied is commensurate with the end proposed, no certainty of result can ensue. The efforts of fifty agents could not ensure the prevention of small pox under a law binding upon them alone, and with provisions similar to the vaccine law now in force. The efforts of no thousand men can command the existence of an unlimited quantity of vaccine matter at a moment's notice. Unless the people are compelled by legislative action to have vaccination performed on their children as soon after birth as practicable, numberless individuals will always exist in all parts of the State ripe for infection. So long as persons will only consent to be vaccinated under immediate alarm of variola, and so long as those who get matter from the agent fail, either through negligence or intention, as they nearly always do, to return to the agent scabs resulting from the use of the matter he forwards them, no power on earth can accede to the wishes of the multitudes crazed with the idea of variolous infection. All the penalties which human ingenuity could devise for the punishment of derelict agents, could not compel them to conform to the requisitions of the law as it now exists. Legislative enactment like our own, cannot increase the facilities for procuring vaccine matter. All the laws in the universe cannot *create* it in unlimited quantity whenever wanted, and no law or ingenuity of human device can cause it to retain its virtues for an indefinite period. The present vaccine law as it stands alone is in all aspects a monument of folly and of injustice. To legislate the moon into doubling its time of revolution, or to attempt by a similar process to diminish the earth's orbit, would possibly afford an analogous specimen of sagacity.

At this juncture it will no doubt occur to some that if the execution of the vaccine law is fiction, that therefore the office of vaccine agent is useless. And as the law and agent are equally unprofitable it would be best to abolish the office; thus saving to the State an annual expenditure of \$500. We beg leave, however, to differ with such logicians. For although the law is inefficient to effect the proposed end, and although the agent can only get matter as others get it, yet regulations *can be* framed covering all the ground desired, and a proper officer is absolutely necessary to the carrying out of these regulations.

The fact is, there should be a law for the *people* as well as a law for the agent, and the agent should be constituted a receiver and distributor of vaccine matter, and not an expected producer of virus. Every

man should be compelled under penalty to have his children vaccinated as soon after birth as possible. Every man and woman should be compelled to undergo re-vaccination at stated periods. All patients on whom the operation was successful should be required by law, under a small pecuniary penalty to return the scab resulting from his or her vaccination to the physician who performed the operation. None save licensed practitioners of medicine should be permitted to vaccinate, and none others should be permitted to apply to the agent for virus. These should be compelled to select from scabs obtained from their patients such as were fit for propagation, and should be required to forward to the agent such portion of healthy scabs as remained after their own wants were supplied. The agent should be constituted a receiver and distributor of the surplus matter thus procured, and be required to furnish *a specified quantity* to the physicians who asked for it. With such regulations the reproduction of virus would be constant, the demand would be equalized, and the supply inexhaustible; and the possibility of the extension of variola entirely prevented, so far as it is in the power of vaccination to protect. The necessity for one or more offices of deposit and distribution is easily understood, since the doctor in Accomack could not possibly be aware that the physician in Kanawha had a supply of virus, or vice versa. It is absolutely necessary this surplus virus should be placed at some central point with which all may communicate with facility. If it be everywhere known that a bureau of deposit for vaccine matter exists in Richmond or elsewhere, all who need virus know where to apply, and the agent becomes the medium for keeping in circulation the virus generated in widely separated regions.

We have now hurriedly sketched the imperfections and impracticability of the present vaccine law, and have offered a substitute, rough in outline, but complete in its tendencies. Much more might be said on this subject, many details might be entered upon setting forth more distinctly the inefficiency of the present statute, and the necessity for its modification; but we think enough has already been presented to show our readers that some alteration is urgently called for, if it is intended that the State should enjoy a complete extension of the vaccine protection to all its inhabitants. The remarks made have been suggested partly by personal inconvenience experienced by the writer for several years in filling the office in question, and partly from a firm conviction of the injustice of this vaccine law to all the parties in-

volved, since it not only requires of its officer the performance of all manner of impossibilities, but also raises in the minds of the people expectations which cannot be realized. While its provisions tax the State, they also lead to a belief which goes farther in some cases to open a door to small pox, by promulgating the idea that immediate protection is always provided, than if there were no vaccine law whatsoever. The unprofessional would without its existence take every opportunity for securing the benefits of vaccination at any cost. The reading of the law, however, seems to keep the remedy always at hand, they are thus frequently led to defer its application until too late.

The power to alter this law is in the hands of our legislators, but the contrivance of the best sort of law can alone be understood and devised by physicians. It is with this belief that the writer now addresses himself to the profession throughout the State, hoping that when their attention is once fixed on this subject and aroused to its importance they will unite in proposing some method of amendment. This concerted action is difficult, as so few from a distance find it in their power to attend the meetings of the State society. The writer would therefore respectfully ask those who take interest in this matter to signify by letter their approval or disapprobation of the vaccine regulations herewith proposed. For, supported by sufficient weight of authority on the part of the profession, the agent might, through its aid, be able to compass a change in the law.

ART. III.—*Contributions to Practical Medicine—Dysentery.* By JOHN P. METTAUER, M. D., L. L. D., of Prince Edward C. H., Virginia.

Dysentery consists of irritation, located in the mucous and sub-mucous textures of the colon and rectum, attended with engorgement of the implicated organs. The irritation may exist chiefly as a functional, or more properly, neuro-functional aberration, or as local inflammation. It is not unusual to meet with dysentery chiefly as a disease of irritation, and for that character to predominate throughout its course; and it invariably commences as a disease of irritation, even when acute inflammation is superadded during its progress. Dysen-

tery may also appear as an adynamic disease from its commencement ; and, in some instances, it is met with as the accompaniment of other diseases, such as typhoid, intermittent, remittent and rheumatic fevers. The anatomical characters presented in fatal cases, clearly indicate that inflammation has existed in the mucous, and often in the sub-mucous textures of the rectum and lower portion of the colon. These appearances, however, are not invariable. I examined the body of a patient that died of what all who saw the case during life pronounced to be dysentery, and I could not discover any of the evidences of inflammation, either in the mucous lining of the colon or rectum. This case was irritative dysentery, and ended in death by its long continuance, thereby exhausting the powers of life. This, with one exception, is the only instance in which I have had the opportunity of making *post mortem* examinations in dysentery ; yet I have treated more than 300 cases of the disease, and have never lost but a single patient out of that large number. Many of the cases that have come under my treatment presented the usual symptoms of the disease well marked, but were unattended throughout their course with fever, or the usual symptoms of a febrile state ; and these examples I regarded as irritative dysentery, not attended with local inflammation of the colon and rectum, but with irritative engorgements ; and these engorgements no doubt furnished the discharges of blood that characterized the dejections. When, on the other hand, the cases were attended with decided fever, and distinguished by its usual attendants, such as thirst ; a dry mouth and tongue ; a hot and dry skin ; general diminution or impairment of the secretions ; an accelerated and generally a contracted hard pulse—as in the fever of enteritic inflammation—and frequently delirium, or great restlessness, I regarded them as instances of inflammatory dysentery ; and that the blood discharged was furnished from inflammatory engorgements of the colon and rectum. And these pathological views are certainly supported to some extent at least by necroscopic appearances.

The causes and symptoms of dysentery are so familiarly known, I shall not attempt their consideration in this paper, which is designed chiefly as the exponent of the method of treating this disease which I have employed for more than twenty-five years.

The treatment of dysentery, now to be considered, will be distributed under several heads :

First, the Initial Stage. In this stage, while the disease may be

supposed to depend chiefly on irritation, I have frequently put an immediate stop to it by the use of the following mixture, properly diluted, repeated two or three times after intervals of two or three hours: R. Tinct. op. camph., Liq. anod. Hoff., aa f3j. ; Tinct. camph., f3ss. If the symptoms are urgent, the doses here stated may be increased. In some instances I have doubled them. This is certainly one of the most effectual compounds I have ever employed in treating the early stage of dysentery. I have never yet made a satisfactory trial of chloroform in the disease ; but, from the good effects of it in spasm of the stomach and bowels and in diarrhoea, I am disposed to think it would prove a valuable remedy in dysentery also, especially in its initial stage. At the same time the abdomen should be extensively dry-cupped, particularly the lower portion of it, as also the corresponding spine ; or counterirritated with sinapisms, or the concentrated water of ammonia. In some cases of very threatening character, I have used simultaneously with the remedies already named, laudanum and starch enemata, with the happiest effects. This remedy should be employed to the extent of producing pretty decided narcotism, and can be repeated, if necessary, with perfect safety, once in eight hours, or after shorter intervals, if the soporific effects of the previous doses are not abiding and decided.

When the disease resists this preventive rather than curative treatment, I have been in the habit of employing cathartics. In many cases a large dose of castor oil, with two or three drachms of paregoric, will put an immediate stop to the disease. More frequently, however, I have used a combination of calomel, rhubarb, aloes and ipecacuanha. R. Hydrarg. chloridi mit., ʒj. ; Pulv. rhei., ʒjss. ; Pulv. aloes, gr. x. ; Ipecacuanhæ, gr. ij. M. This cathartic, however, acts freely, not unusually causing pretty severe gripings, but these as well as the tormina and tenesmus, are speedily relieved after the operation of the medicine.

This cathartic is more particularly suited to the cases attended with a coated tongue, and which early give evidence of defective biliary secretion. In such cases, as soon as the liver is unloaded, and bile is freely poured into the intestinal canal, the dysenteric symptoms disappear. I have repeatedly seen the disease entirely relieved in six and eight hours from the operation of this cathartic. This effect, however, is not invariable. If copious, consistent evacuations are procured, complete relief seldom fails to follow ; but should the dejections be

serous or watery, it will be necessary to repeat the cathartic as soon as the commotion from the first dose ceases. After the disease has continued two entire days, it would not be safe to repeat the cathartic in question, because there would be danger of its proving too irritating in the event of the dysentery having put on inflammatory characters.

After the operation of the cathartic, whether the oleaginous or mercurial, it will always be necessary to administer at early bedtime a laudanum enema. Patients should be restricted to a diet of mild semi-fluids and demulcent drinks, taken cold or tepid, as may be preferred. And even in the mildest cases, they ought not to be permitted to leave their beds or rooms, or to go freely into the open air until every vestige of the disease has disappeared.

The Acute Stage. In many cases it will be necessary, in this stage, to abstract blood, either from the arm or by leeching. With robust, vigorous persons, I have generally had recourse to the lancet with much advantage. In the early period of this stage it can be resorted to with entire safety, and the bleeding should be decisive. When leeching is to be used it must be employed chiefly over the seats of the local irritation; and, if possible, ought to impress the pulse decidedly.

Emetico-cathartics, after bleeding, will often be useful. I have occasionally employed a combination of salts and tartar with some benefit. The dose I employ consists of an ounce of sulphate of magnesia and five grains of tartar emetic at a single dose, in watery solution, early in the morning. If the remedy vomits freely, very marked relief frequently follows: this remedy should not be repeated.

Gentle cathartics are our most efficient remedies in this stage. Calomel or blue mass, administered at night, with one grain of opium, and two of ipecacuanha, to be succeeded by a moderate dose of oil the next morning, will be found the safest and most beneficial mode of purging. From five to ten grains of calomel, or eight to twenty grains of blue mass may be given at a dose. These doses should be repeated daily if the case is violent and threatening; or on alternate days if the symptoms are less urgent. A narcotic enema must be administered every night if the patient cannot sleep without.

Refrigerants and demulcents will be necessary if there is thirst, or if sensations of internal heat are complained of. Pounded ice is an invaluable means of refrigeration; elm water used cool is the best demulcent drink. Acid beverages are proper in this stage, such as lem-

onade, vinegar toddy, peach tea, and the like. As nourishment, I decidedly prefer rice gruel; this should only be allowed in moderate quantities, and after long intervals. Sago, tapioca and gruel may also be used.

Fomentations will now and then be of much service, if the abdominal walls become painfully tender, a condition sometimes to be met with.

The Adynamic Stage. Here a great diversity of medication will often be required to meet the various indications.

Decided purgation is not applicable to the treatment of this stage. All that is required is to administer cathartics in aperient doses, or so compounded as to produce aperient effects. For this purpose, I have found the oleaginous emulsion to answer best, formed according to the following formula. *R.* Ol. ricin., ℥iij; Paregoric., ℥ij; Spir. lavand. comp., ℥j; Gum. arab., ℥ijs; Syrup. simp. s. q. to form a ℥x emulsion. Of this a table spoonful to be taken three times daily. Sometimes I have combined tannin, or the tincture of the unripe persimmon, if the oil is disposed to act too freely on the bowels, as will sometimes be the case.

Narcotics will be required nightly by way of enema, or in the form of Dover's powder. Even during the day they should be given if the evacuations are frequent and exhausting. A form for using them I often employ is the following. *R.* Pulv. opii., gr. x; Acet. plumb., ℥j; Ipecacuanhæ, gr. xv; Aq. font., q. s. ut fiant pil., xv. One three times a day.

Revellents will be demanded if the extremities are cool, and especially, when collapse threatens. Sinapisms to the extremities, and blisters drawn upon the abdomen, over the diseased organs, I have often employed with the best effect. Artificial heat applied extensively to the surface, and in pretty intense degrees, I have also resorted to with marked benefit.

Disinfectants will frequently become necessary to correct the fetor of the discharges, or rather of the enteritic contents; and I invariably use the levigated carbon, mixed in water, in teaspoonful doses, once in four or five hours, until the fetor is corrected. This simple agent I have seen produce astonishing effects in the prostrating stage of dysentery, not only as a disinfectant, but as a roborant, by destroying the fetor of the bowel's contents, and thus removing a poison from the body.

Salivation will sometimes come on from the employment of calomel

as a cathartic, from which the best results have followed. Such accidental cures, from the salivating effects of mercury, early induced me to employ that agent as a salivant in treating obstinate cases of dysentery; and in every instance recovery followed the constitutional effects of the remedy. In some of the most unpromising cases, I have placed my chief reliance on a salivation. In these cases the mercurial should invariably be combined with opium and ipecac; or be used by inunction.

Irritants will often be demanded in the more depressed stages, especially as the danger from collapse threatens; brandy or old rum I prefer for the purpose of stimulation, mixed to suit the palate, and administered in sufficient quantities to maintain the actions of the heart and arteries. It is remarkable in what enormous quantities those incitants can be taken in some cases.

Tonics and astringents are more particularly suited to, and demanded in the latter or most depressed stages. Huxham's tincture of bark, alone or in combination with tannin or the tincture of the unripe persimmon, I have often employed in this stage with benefit. After many trials, I am decidedly of the opinion, that it is very far superior to every other agent of its class. In a few cases the muriated tincture of iron seemed to benefit for a time; but I was compelled to lay it aside, by reason of its disagreement with the stomach. Porter, too, in some cases produces very pleasant effects as a tonic excitant, but, owing to its filling and distending the bowels painfully with gas, I have not been able to continue it long at a time.

The nitrate of silver, and spirit of turpentine I have never employed in dysentery. They may be useful in ulceration of the mucous lining, and are worthy of a trial. By enema the solution of the nitrate may be employed to ulceration both of the rectum and colon. The turpentine, too, can be applied in like manner. I have found narcotics, with astringents, used repeatedly during the day and night, by way of enema, diffused in starch gruel, valuable auxiliaries to excitants. These injections must not exceed a gill in quantity: and, in many cases, I have found half that quantity succeeded best, being retained best. These enemata should be repeated in four hours, and continued through the treatment, only lengthening the intervals as the case ameliorates, and so arranging them that one shall be given every night at bed-time.

The Stage of Convalescence. Little else will be demanded in this

stage, but attention to diet; the regulation of the temperature; the means of promoting sleep, and guarding against exposure, after so far recovering as to exercise out of doors. The diet should be soft, or semi-fluid throughout this stage; and care scrupulously had to allow nourishment only in moderate quantities and after long intervals. All articles of food liable to acid and gaseous reactions in the primæ viæ should be avoided. As a general thing fruit will be improper during this stage. Animal jellies, or thick broth will be well suited as nourishment during this stage. These articles, however, should be used cautiously, as they occasionally prove irritating to the bowels. In many cases convalescence is slow, requiring that patients shall be attended to for a length of time. To guard against rheumatism, which frequently succeeds attacks of dysentery, especially in autumn, patients should be required to put on flannel next to the skin.

I have not suggested the use of diaphoretics in the treatment of dysentery, because I conceived they not only can do no good, but may actually prove hurtful. The incessant restlessness of patients must necessarily defeat, in a great degree, the sudorific operation of remedies in treating dysentery. And should sweating be induced by them, and patients be forced to rise from bed while in that condition, pernicious effects, nine times out of ten, would follow. Spontaneous sweating generally sets in after the disease ameliorates decidedly, and will accomplish all that can be effected through the transpiratory function, and without the danger of suppression from restlessness.

ART IV.—*Of the Curability of Tubercular Meningitis.* By F. RILLIET, Physician-in-chief of the Geneva Hospital. [Archives générales de médecine.]

When Frank was told one day that Heim had cured 30 cases of hydrocephalus, Goelis 41 in 100, and Formey almost every case to which he was called in time, he replied: *Et si viri graves de hoc suaviter blanditi sint, absque ulla in istos injuria quæ in nos ipsos non recaderet dubitare licebit.*

The wise words of that illustrious physician are as true now as they

were when he uttered them ; they embody an opinion derived from a vast experience enlightened by consummate judgment. In fact, withgoing farther back than Camper, who characterized hydrocephalus as *immedicabile vitium*, we are led to believe that the skepticism of Frank is better founded than the exaggerated confidence of Goelis and Formey, and are convinced that physicians who treat hydrocephalus are oftener called upon to deplore defeats than to boast of victories.

Must we admit a fundamental difference in therapeutical skill, or a complete divergence in diagnostic appreciation, in order to explain these contradictory statements of men who enjoyed great reputation and were entitled to it? I adopt the latter opinion unhesitatingly, for I do not believe that Goelis would have succeeded where Frank failed. An attentive examination of the cases published under the title of *cures of hydrocephalus*, has convinced me that these observations relate to some other disease than meningitis, and that if that pathological state had existed, these pretended successes would have been transformed into true reverses.

If the same task which I have undertaken could be repeated in regard to other diseases, science would get rid of many false, incomplete, or ill-interpreted facts, which, like parasitical plants, encumber and retard the progress of medicine.

In fact, careful medical observations are hidden beneath an accumulation of undigested facts, which are reproduced without criticism or commentary by that crowd of authors whose works we are habituated to quote without reading them, who have perpetuated a crowd of errors which it would be well to eradicate from the domain of science.

I have determined to subject to analysis a portion of the cases published by authors as instances of *hydrocephalus* or of *meningitis* terminating in *recovery*, in order to weigh, once for all, the value of these facts.

I shall select most of these cases from the works of justly celebrated physicians, following, as nearly as possible, a chronological order.

My memoir has no pretension to completeness ; but I desire, by citing both positive and negative facts, to relieve those who may be tempted to make researches on this subject from a wearisome duty, and to indicate the method to be pursued in extricating the truth when it is encompassed by error.

Whytt and Fothergill, who are justly regarded as better acquainted with hydrocephalus than any physicians of the last century, have not

adduced any examples of recovery. "I frankly admit, says Whytt, that I have never been so fortunate as to cure a patient in whom this disease was confirmed, and I suspect that those who claim to have been more successful have been deceived in regard to the nature of the disease."

Odier has published four cases of recovery.*

The first relates to a girl of nine years who, in the course of a general anasarca, was suddenly attacked by vomiting, loss of consciousness and convulsions, which ended in intense headache and hemiplegia of the right side. The onset and progress of these symptoms, the morbid antecedents, and the termination of the disease, indicate plainly that Odier had to do, in this case, with one of those cerebral affections which occur in the course of scarlatinous anasarca, and which partake neither of the nature nor gravity of tubercular meningitis.

The second case is not conclusive. It relates to a child of eighteen months, in whom the disease commenced with an *abundant diarrhoea*, followed by vomiting. The cerebral symptoms were not developed until many days afterwards; they were evidently sympathetic with the gastro-intestinal inflammation.

The third case is quite analogous to the second. The fourth observation is a case of ataxic typhoid fever succeeding scarlatina; a dark tongue, meteorism, delirium, high fever and diarrhoea, were the principal symptoms.

By this short analysis it will be seen how necessary it is to criticise severely even those facts which are apparently conclusive. The majority of authors who have written since Odier, have cited these cases as incontestable examples of cure.

Quin published a monograph subsequently to that of Odier, but he adduces no successful cases. Cheyne reports six cases. The first is presented so succinctly that it is impossible to form an opinion as to the true nature of the disease. The second is more complete and positive. It refers to a boy of four years. Three of his brothers and sisters had succumbed to acute hydrocephalus. He appeared prostrated and languid for ten days, and then had vomiting and increased somnolence. Headache came on during the night. The second day

* *Mémoires de la Société royale de médecine, année 1779, p. 213 et suivantes.*

[Watson quotes Odier as stating that on an average 18 cases of acute hydrocephalus occurred in Geneva annually, of which 6, or 1 in 3, recovered. Wood and others copy this statement, but none of these authors cite the work from which their information is derived.—TRANS.]

the vomiting continued ; the child kept its bed and sighed frequently. The face was alternately flushed and pallid, the pulse at 60, and very irregular. The little patient was very drowsy, and continued to sigh. Under the influence of calomel all of these symptoms disappeared.

The irregularity and slowness of the pulse, the repeated vomiting, the headache, the sighs, the changing colour of the face, the drowsiness, the age, sex and hereditary predisposition, compel us to acknowledge that this was an instance of meningitis in the first stage terminating in recovery.

The third case is still more conclusive. It refers to a boy of 8 years, who had lost a brother from hydrocephalus ; he was attacked by vomiting, constipation, headache, slowness and irregularity of the pulse. On the tenth day he complained still more of his head, his eyes were vacant, he sighed constantly, and there were convulsive movements of the muscles of the face ; he would wake suddenly and complain of lancinating pain in the head. Under the influence of a mercurial treatment (calomel, gr. ij., every 4 hours) and leeching, the patient recovered on the fifteenth day ; but this recovery was only temporary ; vomiting, headache and irregularity of the pulse soon betokened the return of the disease. Dr. Cheyne adopted the same remedies, and the patient was definitively cured in about a month from the apparition of the first symptoms.

We must doubt the correctness of the diagnosis in the fourth case ; the child had a quick pulse, hot skin, thirst, pain in the abdomen and no constipation. We may say as much of the fifth case.

The sixth case is an example of typhoid fever, as is shown by the pain and distension of the abdomen, the quick pulse, burning heat of skin, and absence of constipation. The disease lasted thirty days. The mercury produced considerable salivation.

Many of the cases reported by Goelis* relate to other diseases than meningitis : Thus Case 32 is really an history of a scarlatinous cerebral complication ; Case 33 is an example of simple meningitis ; Case 35 refers to a child of 5 years who was attacked by cerebral symptoms after angina ; the symptoms are not fully detailed, and there is nothing to prove that Goelis, in this instance, had really to treat a case of

* *Practische Abhandlungen über die vorzüglichsten Krankheiten des kindlichen Alters*, p. 265.

Dr. Gooch translated this work of Goelis as the best treatise on hydrocephalus that he was acquainted with. The original and translation are now scarce.—TRANS.

tuberculous meningitis. Case 34 is a different affair ; it appears to us evident that in this case the affection just named was present.

The child of three years, who was the subject of it, presented the following symptoms : sadness, susceptibility, lancinating pain in the head, nausea, constipation, changes in the colouration of the visage, dizziness, acceleration of the pulse succeeded by slowness and irregularity, contraction of the abdomen, etc. The treatment consisted in leeching, calomel (gr. $\frac{1}{2}$ every two hours) and blisters ; an infusion of valerian and a few drops of hartshorn completed the treatment during the stage of convalescence.

We have been unable to procure the observations of Heine and Formey, but the analysis that Goelis gives of them proves that Frank was not wrong when he said of them : *dubitare licebit*.

We find no instances of cure in the works of Coindet, Mathey, Parent, Martinet, Bricheteau and Senn. As honest critics, we cannot admit such cases as these :

“ I gave it (phosphorus) in 1802, to young Roger, the son of a boot-maker, in the last stage of hydrocephalus, after wine, bark, etc., had failed ; its efficacy was immediately apparent.* ”

“ The child (Leotier) three years of age was in the second stage of the disease, (dilated pupils, sensibility of light, grinding of the teeth, slowness of the pulse, convulsions, etc.) Each dose of phosphorus moderated the convulsions ; they ceased in the course of the day, and the patient began to improve. The convalescence was protracted.”

The cases reported by Dr. Charpentier† relate to simple meningitis, typhoid fever, or those cerebral reactions which are so common in the course of enteritis or broncho-pneumonia in children ; there is not a solitary one which can be regarded as a tubercular meningitis.

We cannot pass the same judgment upon the observations of Abercrombie,‡ although they are very succinctly reported. Thus, case 75 treats of a young girl belonging to a family, many members of which had died of hydrocephalus, who was attacked by vomiting and headache ; subsequently coma, slowness of pulse and dilatation of the pupils supervened. She recovered after a treatment consisting of blood-letting, purgatives and cold applications.

The following case is still more precise ; we shall quote it entire :

* COINDET. *Mémoire sur l'hydrocephale*, p. 211.

† *De la nature et du traitement de la maladie dite hydrocéphale aiguë*, p. 264 et suiv.

‡ *On the Brain*, p. 222. 1835.

“ A lady aged 15, had violent headache for several days, with impatience of light, followed by transient fits of delirium ; and this by squinting, double vision, and stupor bordering upon coma ; the bowels very obstinate, with occasional vomiting. The pulse was very variable, being sometimes extremely frequent, and at other times little above the natural standard. There occurred paroxysms of violent aggravation of the pain, which produced screaming and agitation of the whole body, and at times there was a threatening of convulsion. This very violent case was treated by repeated general and topical bleeding, blistering, purgatives, and mercury, given so as to affect the mouth. Under this treatment the complaint subsided ; but after she appeared to be well, it suddenly returned with the same violence as before, and was again treated by the same remedies. In this manner she relapsed five or six times, and at last got well after the case had been drawn out to many weeks.”

Dr. Jahn* asserts that he has seen four cases of recovery from meningitis in the third stage. Only one of these facts is reported with sufficient detail to allow of a decision on its nature :

“ A child of three years presented the following symptoms successively : The head was hot, the pupils contracted, the eyes oscillated in their orbits ; there was photophobia, headache, vomiting, constipation, flattening of the abdomen and irregularity of the pulse. . . . The disease progressed ; an attack of general convulsions supervened and complete hemiplegia. Dr. Jahn, despairing of the case, prescribed a large blister to the head and calomel with iodine. The child recovered, but for years was paralyzed on the right side.”

In the English and German journals of a recent date, in Hufeland's Journal, in the *Zeitschrift für die gesammte Medicin*, in the *Württembergisches Correspondenzblatt*, in the *Journal für Kinderkrankheiten*, etc., several cases are reported of children affected with meningitis, treated and cured by iodine. Many of these cases are wanting in detail, or are so vaguely described that it is impossible to form an opinion as to their true character ; but there is one which evidently presents an example of tubercular meningitis terminating in restoration to health :

“ A girl of seven years was attacked by vomiting, headache and constipation ; the vomiting recurred at intervals for five days. On the fifth day the patient was found lying on her back, motionless, comatose, the mouth being open ; she uttered shrill cries from time to time, and ground her teeth. The pupil was largely dilated and was insensible to light. The pulse was slow and irregular, the extremities cold and as if paralyzed. Calomel and jalap, in large doses, failed to produce any alvine evacuation. In these circumstances, Dr. Roeser prescribed hydriodate of potash, which was followed by recovery.”

* *Anecdotes über Kinderkrankheiten*. Eilfter Heft, p. 98.

The most recent memoir which has been published on the special subject we are considering is that of Dr. Hahn.* This physician has reported numerous cases as examples of tuberculous meningitis at the second and third periods cured by the employment of tartar emetic ointment. Of these cases there is only one which appears to us incontestable; we shall presently return to this. Almost all of the other observations relate to children from nine months to two years of age, who, undoubtedly, presented very grave cerebral symptoms. But the age of the patients, the nature and grouping of the symptoms, the absence of several of the most important signs of tubercular meningitis, (slowness and irregularity of the pulse, sighs, etc.,) the existence of other symptoms which are rarely observed in that affection, (great thirst, diarrhoea, intense fever,) and the negligence in the examination of the chest and abdomen, with a view of discovering typhoid or thoracic disease, prevent us from concluding positively that these were in reality examples of tuberculous meningitis. Such doubts, however, cannot be entertained in regard to the following case, as we have already remarked :

“ A boy of five years, of delicate complexion, whose mother was phthisical, and whose brothers and sisters were scrofulous, after prodromes which lasted three weeks, presented the following symptoms: Slow and intermittent pulse, vomiting, headache, constipation, and then drowsiness and dilatation of the pupils. An amelioration was noticed towards the middle of the third week. In the fourth week the child had some appetite, and, in the fifth week, convalescence seemed established, but the suppuration produced by the tartar emetic lasted nearly ten months.

“ At the age of eight years this child had a relapse; the symptoms were the same as on the first occasion, but the disease terminated fatally in the course of the fourth week. The relatives, apprehending the same protracted suppuration which had previously been the consequence of frictions with the antimonial ointment, obstinately refused to allow this remedy to be employed.”

With the exception of the cases of Dr. Hahn, almost all of the observations we have analyzed were reported before the true nature of meningitis was well understood. Since this affection has been definitively classed among tuberculous affections, we know of no authentic case of cure reported by a French physician. MM. Rufz, Piet, Gerhard, Green, Becquerel and Legendre, who have stated in their essays the results of the practice of Guersant, of Bandelocque, and of Dr. Ja-

* In the *Archives générales de médecine*, T. xvii., and in his monograph, *De la meningite tuberculeuse étudiée au point de vue clinique*, juin, 1853.





James M. Curry H. 2.

James M. Curry H. 2.

delot, admit that they have never observed a single recovery. We believe that the physicians who have succeeded those whom we have named at the Children's Hospital of Paris, have not been more successful than their predecessors.

[*To be Continued.*]

ART. V.—*A Memoir of JAMES MCCLURG, M. D.; With Extracts from his Writings.* By JAMES B. MCCAW, M. D., of Richmond, Va.

In the year 1608, about twelve months after the settlement of Jamestown, "Walter Russell, Doctor of Medicine," arrived from England, and "offered his professional services" to the good people of his Majesty's colony in Virginia. Then, for the first time, the doctrines of Hippocrates and Galen, Celsus and Servetus, had a representative on the North American continent, and the medicine man of the Indian fled before the high sounding language and elaborate latinity of the great pioneer of the medical profession in the new world.

Dr. Russell was a man of mark,—the intimate friend of Capt. John Smith, and his companion in his voyages. He rendered that discoverer surgical aid when he was accidentally wounded during his exploration of Chesapeake Bay, and Smith commemorated his friendship and gratitude towards our worthy doctor by calling certain islands which he discovered, Russell's Islands, in honour of him.

Dr. Russell, however, was not permitted to hold undisputed possession of the dignities and emoluments of this large field for any length of time. Capt. Smith soon alludes to a certain Anthony Bagnall, surgeon, who accompanied him on a voyage to Nansemond (now Norfolk), in which place Mr. Bagnall's name and descendants are to be found at the present time.

Both medicine and surgery, then, obtained their first foothold in this continent in Virginia, for the occurrences we are narrating transpired twelve years before the landing of the Puritans at Plymouth.

In the year 1611, it appears that the infant colony rejoiced in the

presence of a third physician, Dr. Bohun, who, disgusted probably at finding the field overstocked, as many others have been since his day, took passage with Lord Delaware, and sailed to the West Indies.

From that time to the present, the honours of the medical profession have been eagerly sought by Virginians, and the flower of the youth of our State have devoted themselves to its study.

When we contemplate this fact, that the study of medicine has ever been the favourite pursuit of Virginians, does it not seem extraordinary that they have contributed so little to its literature? When we look at the general literature of America, we have no reason to blush at the character of the contributions of our compatriots to it. The magnificent state papers of Washington, Jefferson, and Madison, the splendid declamations of Henry, the legal opinions of Marshall, are enduring monuments of the literary capacities of their authors. These men, with Lee, Wirt, and a hundred others, have proven that Virginians are equal to any literary task which they undertake. And yet, when we come to that science which they have cherished above all others, a science which admits of so much experiment and theory, which demands, too, that its humblest votary should contribute somewhat, from his personal observation, to its stores, we cannot find the names of five Virginians, from Dr. Russell, the ancient fore-runner of the now almost innumerable horde, who have left behind them any worthy memorial of their allegiance to their profession.

It is the object of this paper to revive the memory of one Virginian, who did justice to himself, and added lustre to his profession in times gone by; who proved what the Virginia school of medicine *might* have done, and whose bright example may now, after the lapse of eighty years, shame us in our lethargy, and arouse in us a sense of our obligations to our science and ourselves.

JAMES MCCLURG was born in the county of Elizabeth City, in the year 1746. His father, Dr. Walter McClurg, a gentleman of wealth, and a prominent man in his profession, held the first medical appointment, probably, which was made by the State in its independent capacity, for the old records inform us that in the years 1777-8 he was "physician to the Hampton Small-pox Hospital." His son had all the advantages of a complete and thorough education of that day. At the college of William and Mary, he acquired the reputation of an accomplished scholar, and was especially noted for his classical learning.

When the subject of our memoir was seventeen years old, his father

sent him to England, in company with his sister, with the hope that his feeble constitution might be strengthened by the sea voyage, and his mind improved by foreign travel. After returning to this country, and graduating at Williamsburg, he embraced the study of medicine, and a short time afterwards he became a student of medicine at Edinburgh, and remained there for several years. He early assumed a high position in the estimation of the professors of that celebrated institution, and obtained the friendship of Cullen, Black, and other eminent men with whom he associated at that time.

Dr. McClurg obtained his degree in 1770. His inaugural thesis, "*De calore*," was regarded as a profound and original dissertation. It is much to be regretted that this production was never presented to the public, for the suggestions in it were thought to have originated some of the opinions which were afterwards demonstrated by the founders of the French school in chemistry.

After concluding his studies at Edinburgh, Dr. McClurg went to Paris, and after spending some time in making observations in that great medical centre, he returned to Great Britain, and became a resident of London. Here he diligently prosecuted the study of his profession, and soon published a part of the results of his reflections and experiments in his "*Essay on the Bile*, London; 1772." This work gained great reputation for its author, both as a man of general accomplishment, for its style is charming and elegant, and as a physician. A copy of it is now before us, and before concluding this paper we intend to notice it in detail, for on its merits the posthumous fame of the subject of our memoir, principally depends.

In 1773, Dr. McClurg returned to his native country, although he was strongly urged to remain in England by many distinguished men. He established himself at Williamsburg, the seat of the colonial government. Although he was surrounded by men of eminence in medicine, and had among other competitors the celebrated Dr. Arthur Lee, brother of Richard Henry Lee, and afterwards ambassador to France, Dr. McClurg soon won his way to the head of the profession, and held this honourable station for a period of fifty years.

When the seat of government was removed to Richmond in 1780, Dr. McClurg became a resident of that city, and died there on July 1823, at the advanced age of seventy-two years.

Dr. McClurg was universally acknowledged even the men of his time by the admiring comparison of his education, both parental and pro-

fessional. He was master of various languages; his course of study was long and patiently pursued, with all the advantages to be derived from an attendance on the great schools of Scotland, England, and France, and from intimate personal relations with many of the learned men of Europe. His own mind, bold and original in its habits of thought, was always inclined to discard the trammels of the schools. His profound views of the philosophy of his art, his close attention to the minutiae of his profession, and his great practical sense combined to endow him with all the attributes of a great physician. Although he was a perfect anatomist, and familiar with the art of surgery, he early withdrew himself from the practice of that branch of his profession, and for thirty years of his life he was almost entirely employed as a consulting physician, for which office his varied learning and admirable sagacity peculiarly fitted him.

Although he always declined the practice of surgery, yet he was well aware of the opportunities which operations afford for display and popular applause. He knew that men as uncultivated in intellect as butchers had placed themselves before the scientific student and patient investigator of disease, by a few brilliant and successful strokes of the knife, and obtained honours and emoluments. Hence, he was accustomed to advise his nephew, the late Dr. James Drew McCaw, while prosecuting his studies in Edinburgh, to turn his attention to surgery. Some of the letters which he addressed to his nephew at this time give us an insight into the condition of the profession of that day, and as they also contain the opinions of this eminent man on some important points connected with the study of medicine, we shall make some extracts from them.

In a letter to his sister, dated July 24th, 1778, he advises her to apprentice her son to a surgeon, and says :

“I hope he will not suffer himself to be debauched by the young company he must necessarily fall into. But he will have occasion for all his prudence, as more licentious youths are hardly to be found anywhere than I remember to have seen in Edinburgh. Mr. Wood was a principal surgeon there in my time—a Mr. Bell has since acquired reputation. I still think that if James has not an aversion to it, surgery ought to be the first object of his attention, and Monro’s class of Anatomy the first class he should attend—he will find his success in that line much more sure and certain than in physic. I expect to hear from you and James when you get there, and I will either give him my advice or recommend him to that of some of my acquaintance there.”

He writes again in 1790, on the same subject, and exercises the peculiar privilege of his profession, that of grumbling at his calling. He complains of the irregularity with which his dues are collected. We are sure that there are many physicians of our own day who must plead guilty to this same carelessness in the management of their private affairs, which has been such a prolific source of evil both to individuals and to the profession :

“ James is at an age when a right or wrong direction of his conduct must very much influence the success of his future life. If he discovers a sufficient degree of prudence now, he can hardly want it hereafter. I observe that his affection for his native soil attracts him strongly to Virginia. This country has not, since the revolution, been favourable to his profession. It may however grow better, if by a good government and tranquility the people are allowed to emerge from the distresses occasioned first by their extravagance and then by the war. With respect to myself, I can assure you that the profits of my profession do not support my family, and that I must, if I had no other dependence, live very indifferently. This however is partly owing to my not uniting the apothecary’s and the surgeon’s business with the physician’s, as is common in this country ; and to my not being an adept in another necessary qualification of a doctor, viz., *dunning*. But I see many of those who are continually engaged in common practice making little progress in the acquisition of fortune, and often, instead of getting forward, involved in debts and difficulties. It is easier, perhaps, to succeed to a certain degree, as a surgeon and apothecary, in this country, than any other. But great economy and circumspection, and a long life, are necessary commonly to make anything like a fortune by it. If James should come here, I cannot think that a graduation will be either necessary or advantageous to him ; for it does not certainly give any preference in this country, or weigh anything in the opinion of the people. A strong recommendation from his master, Mr. Bell, I believe would have more influence. If he should get employment in England, it can only be as a surgeon and apothecary, where his diploma would be of no service ; and if after some years practice, he should find it useful to take a degree, it will be always in his power.”

Another letter, which we insert in full, affords us a very good idea of the prospects of the medical man of that day :

“ RICHMOND, April 15, 1792.

DEAR JAMES,

The gentleman who brings this, Mr. Watkins, is about to pursue the course of study which you are just quitting ; and may be

obliged to you for such information and assistance as are commonly useful to a stranger. He comes from the most remote part of this country, Kentucky, where a few years ago there was not a single white inhabitant, yet has it already grown into a separate and very respectable State. You see what a growing field there is here for industry in every business and profession.

It is possible that you may have quitted Edinburgh before this reaches you, as your letters suggested that last winter would be the last of your medicinal studies. You will I hope come furnished with some of the most necessary medicines, in a small assortment, together with the instruments used in most common operations of surgery, that you may immediately begin your course of practice. For nothing is more pernicious to a young man than want of employment, and in your profession knowledge commonly increases with every step in practice.

You will see when you arrive where it will suit you to settle. Norfolk is a very growing place, but it seems to be under the almost despotic influence of ———. Hampton is worse than it used to be ; affords a sufficient opening in your line, but hardly worth the gaining, except as a step to something better. In this town the faculty are crowded so as almost to starve each other !

I wish you the best success, which I dare say you may ensure by prudent conduct,

And am, dear James,

Your affectionate,

JAMES McCLURG."

The plethoric condition of the faculty of Richmond in the year 1792, which is above alluded to, seems to have become a chronic disease, which a period of more than sixty years has failed to remedy. We are sure that if our old worthy could rise from his grave and count the hundred or more practitioners of medicine in this city, he would not think that matters had improved much since his time, and would gladly return to his moss covered tomb in the church-yard of St. John's, contented that his day of turmoil and strife was over.

In the long line of distinguished physicians which Virginia has produced, Dr. McClurg deservedly holds the highest place. He was an eminently fortunate man. Nature had endowed him with great talents, and placed him in the most favourable circumstances for their development. His faculties were carefully trained and cultivated from the commencement. He was a laborious student, he had the advantage of associating with the best men of his age, a life of nearly fourscore years was vouchsafed to him, and he became not only an accomplished

scholar, but a profound and original thinker. He was no second hand, borrowing man. He knew what his cotemporaries and predecessors had written and said, but he stood on his own basis and thought for himself. The physiological theories which he suggested have lately been promulgated as among the most brilliant discoveries of the modern French experimentalists. His views on chemistry were far in advance of the doctrines which prevailed during his life time.

He shone in the world, too. He was the leader of that brilliant society composed of such men as Marshall, Attorney-General Randolph, Bushrod Washington, and Wickham, his illustrious son-in-law, the traditions of which have come down to us. Although belonging to a school in politics not a favourite with the people, he was elected by them a member of the convention which drafted the Constitution of the United States.

Altogether he was a man far above the common stamp, and worthy of the high position we have unhesitatingly claimed for him. He furnishes us with a noble example of great abilities well directed, and of a long life well employed. How can our time be better spent than in studying the lives of men who, like McClurg, have adorned our profession in Virginia, and how should their bright example stimulate us to shake off the lethargy which appears to have crept into our ranks in the last half century, and to emulate their virtues.

Experiments upon the Human Bile, and Reflections on the Biliary Secretion, with an Introductory Essay. By JAMES MCCLURG, M. D. A. D. 1772.

“*Jussit quod splendida Bilis.*”—HOR.

C'est une erreur de croire, q'une experience aveugle, et une habitude mechanique, tiennent lieu de principes surs, et de maximes fondées sur un solide raisonnement—

Traduct. d'un discours sur la commerce, par M. le Marquis BEECARIA.

The experiments which we have already alluded to in the memoir of Dr. McClurg, with the accompanying introductory, are worthy of a much more elaborate notice than we are now able to give them. We will, however, endeavour to present to our readers as far as space will permit, such extracts as will enable them to comprehend and enjoy the original thought and elegant style of the work.

This essay is divided into two parts. The first being an argument on the necessity of *Reasoning in Medicine*. The second being the subject proper ; i. e., Various experiments on the human bile and theoretical and practical deductions drawn from these experiments. Our author opens his subject as follows.

There is no art, unless this term can be applied to religion, which seems to require in its professors such a perfect harmony of opinion, as the art of medicine. For there is none in which error is of so much consequence, or where a fluctuation of the mind between opposite sentiments is attended with such anxious distress. Yet medicine has its schisms; and the sages of our art, while they appear devoted to Truth, forget her peculiar caprice: that, though she loves to be pursued with ardour, she must still be addressed with indifference.

The keenest shafts of ridicule have frequently been levelled at this trait in the medical character. Our singular gravity and solemnity placed us, as it were, in opposition to the free, the gay, and the witty; and they eagerly seized a circumstance, which seemed to reduce this extraordinary figure to the common size; and to show, under a face of great wisdom, much ignorance and uncertainty.

But in reply to these sneers we may answer, "That our science is progressive and subject to perpetual change, and that we may and must differ from our venerable ancestors. In truth, physicians notwithstanding some external differences, which would deceive perhaps an unexperienced Houynhnm, are yet no better than mere Yahoos;" or as the old proverb has vulgarized it, that "doctors will differ"—(a proposition which we do not think will be disputed by any one at this time). Our author more elegantly expresses it, "To associate is not more a principle than to separate." It is not attraction alone which governs the material world; the laws of repulsion have also their influence, and it looks as if they had their analogous principles in the moral system.

But these internal factions, which range us under the banners of so many leaders, are equally opposite to a set of men who will acknowledge the authority of neither. The sticklers for different systems, however averse to each other, unite like the domestic parties of restless Britons against a common enemy. It is hard to say when this quarrel began between empirics and dogmatists, or when it will end. It seems to be as ancient as the origin of reasoning in physic, which could not be long after the beginning of observation itself; nor will it cease, most likely, until our philosophy has acquired perfection; an æra still more remote.

The writer thus proceeds to show that the profession is divided into two parties. The theorists or dogmatists, and the empiric or practical man, but that in truth they should act together. "Every step of experience approaches towards system; since, by discovering the natural

relation of things, it prepares us for establishing principles; and theory, or the application of these principles in explaining the phenomena around us, is the favourite process of the human mind."

We notice in our own day precisely these same distinctions. On the one hand we have the *theorist*, the philosopher,—the man of the schools and the closet. On the other, the *practical man*, who deals in facts, who does not theorize over his patient, but grapples with the disease. See our theorist of modern times, he probably has just arrived from Paris, is apt to wear a moustache, and uses new terms and French instruments. He is familiar with all the authorities of his own school, and when asked for a remedy, gives you a theory. His patient has a scald head, instead of ordering a tar cap, he tells him the disease is a vegetable parasite. Is it a cancer? He calls for his microscope. Behold our practical man, who throws his saddle bags armed with a half dozen vials (the remainder having been broken some time before), on his trusty horse and goes his daily round of duty, relieving the sufferer and giving hope to the desponding. Talk to him of philosophy, he wants a prescription; tell him of parasites, he prefers a pill. Microscopes are humbugs, and he swears all the day long by calomel and quinine.

But, says our old author, "This is all wrong, for the danger to be feared from these various theories is surely imaginary. If they inflict a wound, they bring along with them its remedy."

—————Qua cuspide vulnus
Sensit, et hâc ipsâ cuspide sensit opem.

While every theorist feels a warm affection for the child of his own fancy, he pursues with severest scrutiny the schemes of every rival theorist, and a succeeding dogmatist lops with as little tenderness the luxuriant growth of his over-heated imagination.

And accordingly we observe, that as the rise and struggle of parties denote firmness and health in our excellent political constitution, so the perpetual growth and contention of systems is a mark of vigour in the state of medical knowledge. When Europe was sunk in ignorance, and every sort of improvement languished, Galen tyrannized for ages in the schools of physic. The first dawning of the rays of science

—————Ubi pulsam Hyemem sol aureus egit
Sub terras, cœlumque æstivâ luce reclusit.

seemed to restore some activity to the torpid minds of men, and disclosed the buds of another system.

This prolific birth as well as transitory existence of systems are evidently connected with the progress of experiment and observation. They remind us of the ancient fable of Saturn and his offspring, while they appear to devour the theories to which they give origin. “But this should prevent us from being wedded to any system; yet, we may certainly treat it as a mistress; embrace it with ardour at present and discard it whenever we are disgusted with its defects, or attracted with the superior qualities of another.” The quarrel between the empirics and dogmatists is unnatural. “As well might the senses quarrel with the intellect, and each pretend to exercise their functions separately. Every one sees that they are useful only when they are combined, and that their excellency consists in their aiding and correcting each other.”

The number of absurd theories should not, therefore, inspire us with an antipathy to the term; nor must a panic terror of them banish physicians from the sacred temple of philosophy. To be hurt with the imperfect, and puerile commencements of reasoning in physic, and to relinquish the hopes of a rational theory, is to be offended at the childish prattle of infancy, and to expect nothing better from a maturer age. That Being; who formed the mind of man peculiarly capable of improvement, and though he fixed the limits of existence, and of the acquisition of knowledge in the individual, appointed no such boundaries in the species; has implanted in our breasts, together with curiosity, a fondness of system; and it is justified by the relations of things. Experience, while it discovers these relations, gives occasion to the exercise and display of that passion. If, therefore, we are determined to reject all system in medicine, let us oppose every obstacle to the natural progress of knowledge. We may begin with rejecting those sciences, anatomy, chymistry, and every branch of physics, which delude us continually with the hopes of penetrating into the secrets of the œconomy. Impenetrable dullness should henceforth be as necessary an appendage to the profession, as inflexible gravity. Genius must quit, in despair, a walk so little accommodated to his exertions; and the art, considered as a mere species of traffic, must fall into the hands of the stupid, and sordid part of mankind.

Let the sons of dullness, and indolence; or if there should be found a physician of extensive practice, with a naturally barren, and little-improved understanding, let him deny the use of theory. We believe, most sincerely, that he is ignorant of its proper use; and when he finds that all the profits of medicine can be reaped without such a troublesome instrument, he may really think it unnecessary,

Gestit enim Nummum in loculos demittere, posthoc securus.——

The author goes on to discuss the propriety of the subdivisions in the science between medicine and surgery, and thinks that however much they may be separated in practice; in their study, they should be kept together. “For instance, in the art of war, a great personal dexterity in the management of arms, was common enough; but an

extensive system of operations required an acquaintance with principles which mere habits could never teach."

The reader, I hope, will not find anything whimsical in this comparison of arts, which have equally the appellation of murderous; nor be led to fancy that a dogmatic and an empiric differ like a Mareschal Turenne and a savage warrior; chiefly because the former pursues more scientifically his destructive schemes.*

The next step in this essay is a discussion as to whether the laws of the material system are governed by an immaterial principle or soul, or under the control of a material or nervous energy, an integral portion of the body. He says that though we discover marks of intelligence in every work of nature, yet their supreme author directs

* The comparison between the arts of war and medicine seems to have been a favorite one with the profession of that day. Dr. J. Langhorne (a cotemporary of Dr. McClurg) in a letter to Miss Hannah More carries out the idea so ludicrously and ingeniously, that we cannot refrain from giving our readers his description of what may emphatically be called an *Intestine War*. He writes in 1776:

"I have been totally depressed, sunk down, and buried beneath a complication of rheumatic, scorbutic, nervous, and bilious complaints. These rebellious powers, like the Americans on their continent, carried every thing before them in a very unconstitutional manner indeed. At last matters came to a crisis. General Bile was appointed commander in-chief, and led the whole forces of Rheumatism Bay, Scurvy Island, and Nervous Province, into the very centre and heart of my dominions, and drew up his army in form of battle. I drew up my whole force against him in the following order:—

"First battalion, a body of Emetic Tartars, under the command of General Ipecacuanha. These fought with uncommon bravery for one whole day and a night, made prodigious havoc of the Biliary forces, and took their General prisoner. A truce was proclaimed for twenty-four hours; when it appearing that a large body of the Biliaries had secreted themselves in the lower parts of the country, I despatched the

"Second Battalion, consisting of foreign troops, chiefly of the provinces of Senna, Tamarind, and Crim Tartary, under the command of Sub-brigadier-general Cathartic.

"These brave soldiers behaved with great courage and gallantry; defeated the Biliaries in fifteen pitched battles, and at last totally drove them out of the country. The above two battles lasted five days and five nights. The engagement was at first so hot that victory was doubtful. It was indeed a dreadful and a bloody combat, and I certainly can never forget it.

"On the sixth day a few of the Nervous regiments were seen straggling, but being pursued by Colonel Cordial with the Jalap light-horse, they threw down their arms. The troops of Scurvy Island concealed themselves in the woods, and other inaccessible places.

"Thus, my dear madam, have I given you a circumstantial account of a most desperate and dangerous contest I maintained for my all. What were the battles of Bunker's Hill and Long Island compared to this?"

the operations of matter by fixed laws, and it is the duty of science to investigate these laws. The Animist point to the *vis medicatrix naturæ* as the evidence of the influence of this intelligent principle; but—

We certainly observe, that the *vires medicatrices naturæ* are much more perfect in a *polypus* (whose share of intelligence we may believe is not very considerable) than they are in a man. Since, while they cure with some difficulty a small wound in the latter, they form, from each of the divided pieces of the other, a complete animal.

The introductory concludes with an apology for the new theories the author is about to propose :

This sort of knowledge is so valuable, that every endeavour to extend it is meritorious. It will shew a laudable inclination, and some degree of judgment in the choice of our road, though the state of our abilities, or opportunities, may deny us the praise of a considerable progress. And even when we fail of producing a clear conviction, it is rare that, in the collision of facts, no sparks are struck out to show a future adventurer his way.

We now approach the second part of our subject, and as it is obviously impossible to present to our readers a full description of the many experiments made on the bile, and the deductions drawn from them, we must content ourselves with offering a brief abstract of the remainder of this admirable work.

After experimenting on the bile with various acids and with heat, and seeing the action of this secretion on muscular fibre, fat, &c., &c., he arrives at the following conclusions: First, that portion of the blood which has advanced so far towards putrefaction as to be unfit for the uses of the system, is brought to the liver and becomes bile, *which is itself ante-putrefactive, and goes into the intestine neutralizing the acids of the gastric bolus and arresting the process of fermentation.*

Is there “no spark struck here which has shown a future adventurer his way?” Let the student of M. Bernard’s *recent discoveries* with regard to the functions of the bile compare his theory with that above stated. He says, “Bile mixed with the gastric juice renders the mass alkaline, &c. It renders the chyme indestructible and impu-
trefactive.” M. Bernard substantiates this by immersing two portions of flesh in vials, one containing bile, the other having none of that substance. He finds that the bit of flesh in the vial with the bile remains after three months pure and untainted. The experiments XXXVI., VII. and VIII. of Dr. McClurg are almost precisely similar,

and are followed with the same result. "By precipitation," says M. Bernard, "bile has moreover the effect of arresting every kind of fermentation." Dr. McClurg says, (p. 138,) we may deduce the fact from these experiments "that the progressive fermentation which has taken place in our fluids from their first change in the stomach, is regulated and kept from arriving at its last term by the colouring matter of the bile."

Again, proposition second of Dr. McClurg's is in his own words: "From the milk we obtain a matter analogous to the *sugar of vegetables*, and that *somewhat of the same kind is contained in the bile* seems evident from its sweet taste," &c., &c. "We may suppose that it is evolved and rendered more evident by the *animal process of the milk and of the bile in some such manner as it is evolved in the farinaceous seeds by the vegetable process attending their germination.*"

Here is "a spark" which has blazed out after eighty years into a splendid discovery. In the Archives de Médecine of November 1848, M. Bernard announced to the world his *brilliant discovery* that sugar which was so generally found in the vegetable kingdom also existed in the animal. "As vegetables do not find it already formed for them in the earth, but manufacture it for themselves, so he has proved experimentally its production as one of the habitual physiological actions of the liver."*

Our old father then eighty years ago declared that the liver secreted sugar; and arrived at the same conclusion by a process of pure reasoning, that the justly celebrated Bernard has but lately done by a beautiful and elaborate method of experiments.

"Multa renascentur quæ jam cecidere; cadentque,
Quæ nunc sunt in honore."——HOR.

The theory being acknowledged then that bile is formed of blood in a state of putrefaction too far advanced to be of any use to the system, it is easy to account for the prevalence of diseases of the liver in warm climates where the process of decay is hastened by the intensity of the heat, the effects of malaria, &c., &c., or in the language of the author:

If the hypothesis is well founded, we must observe, that whatever accelerates the septic animal process, has a tendency to increase the biliary secretion; since it favours that change of the blood which fits it for becoming bile. And is it not in this light that we are to view the large secretion of bile, which seems to be always the consequence of a continuance

* Donaldson on Bernard. Am. Jour. Med. Sciences, July 1851.

of hot weather; and which shows itself, more remarkably, in the intermittent and remittent fevers of the warm climates, arising from putrid miasmata? For, that this symptom is not so much the effect of the intermittent paroxysm, as of a certain state of the fluids in the hot season, appears from an observation of Mr. Cleghorn's; that when the intermittents of the summer continued until the cold weather set in, they lost their malignity and contagion, and were no longer attended by the excessive redundancy of bile.

But we frequently see vast quantities of bile discharged into the intestines, without producing either fever or dysentery. And this is especially the case in the *cholera morbus*; which shews itself sometimes in this climate about the autumn, and in hotter countries before this period, during the course of the summer; and appears to be the true and genuine effect of heat. The disease consists in a more abundant, and probably a more acrid secretion of the bile; and it is to be explained from the known effect of a continuance of hot weather, in favouring the spontaneous degeneracy of our fluids, and in accelerating that septic animal process, by which we imagine the blood is converted into bile.

The unwholesome exhalations arising from marshes, the effluvia of stagnant pools, and the noxious vapours from badly ventilated ships, houses and cities, all are produced to show that any cause which tends to hasten the degeneracy of the fluids and to urge on the septic process, will increase the secretion of the liver. The effluvia from prisoners confined in close jails produce jail fever; the miasmatic poisons of the West Indies generate yellow fever, &c., &c.

The remedies applicable to all of these diseases then are found to be those which add tone to the general system, assist nature in throwing off this enlarged secretion and check the causes of its increased production. Hence the propriety of free purgation and the use of all the tonics, especially the Peruvian bark. Hence we transport our patients to a climate free from these noxious agents. Our author cites Dr. Lind as authority to show the value of keeping about the person in these climates camphor and other volatile substances as a precautionary measure. "According to Sir John Pringle, camphor is a powerful antiseptic, and we can scarcely conceive a more rational method of obviating the effect of these putrid vapors than by surrounding the body with an antiseptic atmosphere." Hence we see the use of fumigations of tar, gunpowder and other depuratories.

Our author looks on the increased secretion of bile not as a disease, but as an effort of nature to rid the system of this septic degeneracy, and his experiments show that this process is a double one; first, by the direct evacuation of this evil element, and secondly, because the bile itself being an antiseptic prevents the perpetuation of this putrefactive tendency. His experiments prove that the bile after being

thrown into the intestines meets with the contents of the stomach, and is coagulated by their acid portions. The precipitated particles of the bile being taken off with the fœces, the colouring and antiseptic ingredients are absorbed, and thus check the continuance of the animal septic process. As we have before said, Dr. McClurg in these theories stands side by side with M. Bernard.

And this gives us another view of the final cause of that larger secretion of bile, which is the constant effect of a long continued heat. We considered it, before, as corresponding with the more rapid progress of the circulating fluids in their septic degeneracy. But it is agreeable to the wisdom of nature, that she should, by the same contrivance, separate from the mass a matter which was growing pernicious, and prepare one that shall be useful. And, accordingly, she has taken the greatest pains to make the quantity of acid in the stomach, at this period, bear a proportion to the redundancy of bile; that so the operation may be completed. She covers the earth with a quantity of acid, or acescent fruits, as tempting to the eye as they are delicious to the palate. She diminishes our appetite of hunger, while she increases that of thirst; and thus not contented with alluring us by pleasure, she seems willing to determine our choice of food by necessity. At the same time she diffuses over us an indolence and inactivity, that while they make a more substantial aliment unnecessary, deprive us of the inclination to seek it. Without the artificial distinctions of society, neither bread nor meat could be obtained, except by the labour of the individual. But the fruits, in such climates and seasons, present themselves spontaneously.

—————Nullis hominum cogentibus ipsæ
Sponte suâ veniunt—————

Lastly, to elaborate still farther his theory that the secretion of bile is increased by anything which urges on the fluids more rapidly to the putrefactive stage; he cites the fact that amongst the inhabitants of warm climates there is a greater irritability of the nervous system, a quicker circulation, and an excitability of temperament, which marks the difference between them and the colder blooded Englishman or German.

The bilious constitution seems not to be natural to this climate, where the temper of the people is as distant from the torpid strength of the inhabitants of the north, as from the too delicate and sensile habit of the southern nations. Their moderate irritability, joined with a sufficient share of vigour, is connected with that state of the powers of circulation, in which red blood seems to be formed faster than it degenerates. Hence their full and sanguine habit; so that an Englishman may generally be distinguished, among the southern people, by the *purpureum lumen* which shines upon his countenance. Yet we frequently see this sanguine *plethora* exchanged for a bilious one, in consequence of an alteration which the constitution suffers from a warm climate.

After giving a theory upon the formation of gall stones, which he

attributes to the coagulation of bile by the acids of the stomach; which precipitation not being taken off with sufficient rapidity by the intestines, gradually concretes, and may become impacted in the ducts of the liver; and alluding to the remedy of Van Swieten for the cure of biliary calculi by turning the patient out to graze with the cattle, which he thinks if it did good at all, only acted by producing purgation which swept away the concretion, Dr. McClurg concludes with some general remarks which are replete with practical sense, and in many points shew how very far his bold original mind had led him beyond the great body of his cotemporaries.

Allowing that the ordinary tendency of warm climates is to produce a condition of irritability and nervous prostration, and thus hurry on the fluids to that putrefactive point which renders bilious disorders of all sorts prevalent; he says, "that our ordinary mode of living is not calculated to obviate but rather increase the influence of the causes mentioned. The common use of tea tends to injure the tone of the intestines. The debility which follows demands a stronger stimulant, and hence a foundation is laid for the use of alcoholic drinks. No one doubts that the temporary vigour produced by their use is followed necessarily by a weakness which calls for a repetition of the stimulus."

The gout, with its doubtful face which regards at the same time the inflammatory, and the nervous diseases, frequently interrupts this course by an unwelcome visit. Yet it seems to be a necessary, though painful operation: employed by Nature for supporting, in the best way that we have left her, the vigour of the system. One discovers in it the ancient strength of the northern constitution, struggling with the enfeebling modes of modern life. And, in a little time, it will be lost entirely in that train of more purely nervous disorders, which have lately become so numerous. These obtain different names according to the theoretical notions of the physician, and his patient. They are sometimes called disorders of the stomach, sometimes nervous, and at other times bilious disorders; and generally they have a right to every one of these appellations. For it is impossible that the nervous system should be much injured, and the functions of the alimentary canal remain entire, and unaltered; and such is the sympathy between this canal and the biliary organs, that they will commonly share in the affection. But it is certain, that they flow originally from a disorder in that power, which is the source of all the motions in the machine.

The medical man of our day sees how true is the prophecy contained in the above extract. The vast array of nervous diseases which meet us in all forms and under all circumstances are here clearly and graphically portrayed. Inculcating the use of all the prophylactics to prevent this condition of the constitution, the advantages of exercise, of bathing, and of acid diet; and the avoidance of spirituous drinks and stim-

ulating and heating articles of food; our author thus elegantly moralizes.

Yet I feel, while I am writing, that these remarks will have little practical use. I shall not gain a single convert, even amongst those people whose refined feelings, and cultivated understandings, must make the perfect exercise of their faculties, more delicious than any sensual gratification. Yet the sensualist himself, if he is wise, will be temperate; and preserve that exquisite relish, which a perfect state of the functions communicates to every animal enjoyment. He remembers how poignant was every sensation, while his organs were yet fresh, and unworn; and will be careful not to waste, like a prodigal, that stock of sensibility which might furnish a life of pleasure. Nor can he pretend, without risking an imputation upon his taste, that any composition of the most knowing artist is half so agreeable to the palate, as the fruits which Nature herself prepares.

We end our task by giving our readers the closing paragraphs of this original and learned production. They contain the practical conclusions deduced from the theories we have briefly and imperfectly sketched.

The change induced on the nervous system, productive of weakness and irritability, seems to be the fundamental fault of the constitution in these climates: from which, as a common source, are probably derived the quicker circulation; the more rapid progress of the fluids in their septic degeneracy; the redundancy of bile; the disposition to violent spasmodic disorders, and to fever. The most natural and obvious means of preventing these effects of the heat, is the application of cold to the surfaces of the body. Bathing, that act of equal voluptuousness and religion in the eastern countries; and all the methods of cooling the air by evaporation, which enter into their system of luxury; the inhabitants were led to by Nature, and continue, from an experience of their salutary pleasure. To be in possession of ice and snow during hot weather, requires a little more management and contrivance. But, in some of the southern parts of Europe, the use of these refreshments extends through almost every rank of people. And we are assured by their physicians, that it is not only a very healthful luxury, but even a remedy of considerable importance in the disorders of their hot season. It is surprising, that the inhabitants of our American colonies do not endeavour to procure this enjoyment in their warm summers. They would find an ice in the afternoon, an admirable substitute for those warm liquors, with which they relax still more their enfeebled stomachs; and its expence would certainly be overpaid by its pleasure and utility.

The acids approach the nearest to actual cold in their effects on the œconomy. They produce a sense of coolness, relieve thirst, oppose putrescency, repress the inordinate disposition to motion in the system, and give a degree of astringency, with a gentle irritation to the parts more immediately subjected to their action, the alimentary canal and its appendages. They have been observed to relieve that languor and faintness, which are occasioned by excessive heat, when no benefit resulted from the common stimulating cordials.* Their peculiar operation upon the bile, which seems to bear the strongest marks of Nature's providential care of the œconomy, has been

* Lond. Med. Obs., vol. 1., p. 66.

already considered.* And from that view alone we were convinced of the necessity of using them in greater quantity, whenever the body is exposed to the continued influence of great heat. They are then demanded by the appetite, and cordially received by the stomach; for in hot weather, and in a fever, we bear very well a quantity of acid, that would be apt, in other circumstances, to disorder the first passages.

Here we must pause. We are sure we have not done justice to our subject. We have simply attempted with our rude chisel to tear away the moss of time which obscured the fame of this eminent man, and with pious hand to cut more deeply on our memories the name of JAMES MCCLURG.†

* *Op. cit.* Page 134, &c.

† The portrait prefixed to this memoir is taken from a bust of Dr. McClurg in our possession, and is sketched and lithographed by our friend Dr. A. E. Peticolas; who is not only an able contributor to this Journal with his pen, but adorns its pages with the products of his skilful pencil.—Ed.]

ART. VI.—*On Purpura Hæmorrhagica, and its Treatment by the Oil of Turpentine.* By SAMUEL PATTESON, M. D., of Manchester, Va.

The pathology, and consequently the treatment, of the disease which is variously designated *purpura*, *porphyra hæmorrhagica*, *morbus maculosus Werlhofii*, etc., is still unsettled. The older writers associated it with scorbutic affections under the name of *land-scurvy*; the dermatologists regarded it as a cutaneous eruption. Cazenave and Schedel retained it in their domain, but assigned it a place in a separate order, the hæmorrhagic affections of the skin. It appears now to be generally agreed that it is a distinct *blood disease*, yet when we enquire into the actual alterations which occur in the blood, we encounter the most contradictory statements. Dr. Hérard reported last year to the French Academy of Medicine an analysis of the blood of a purpuric patient, in which it was impossible to detect the slightest trace of fibrin. Other writers on animal chemistry declare, on the other hand, that the blood in this disease does not assume the form of *spanæmia*, and that the proportion of fibrin is even augmented.

It is not my design, in this paper, to investigate the pathology of purpura, or to base any method of treatment on theoretical views of

its causes. I purpose simply to relate a few cases which illustrate, to some extent, the beneficial effects which the oil of turpentine sometimes exerts on the disease.

CASE I.—P. S——, aged 12 years, sanguineous temperament, active and sprightly, of sound constitution and previously good health, born of healthy parents, and living in the enjoyment of all the comforts of life, was suddenly and without any obvious cause attacked by purpura.

When I first saw him, he was literally sprinkled over with minute red specks, somewhat resembling flea bites. The eruption was more abundant on the lower extremities than elsewhere. The pulse was quick and not without force; the skin was hot and dry; the general appearance was such as is usually presented in the incipient stage of the exanthemata, with which, indeed, this disease is classed by Willan and his followers.

In a few days symptoms were developed unlike those which usually characterize purpura. The patient suffered the most excruciating pain in the lower extremities. Every attempt to move the lower limbs excited severe suffering. The colour of the petechial specks was redder than usual, and this florid appearance continued for several days. There was a sthenic condition of system, and a general heat of body, inconsistent with that scorbutic state which usually attends upon purpura. At a later period of the disease, and after repeated hæmorrhages from the bowels, the spots became darker, a few vibices made their appearance, and a dusky hue of skin supervened.

In the absence of any well established pathology, the treatment was necessarily adapted to the symptoms. The disease manifesting at its onset decided phlogosis, was combatted by antiphlogistics, cautiously and moderately used, in view of the probable ultimate tendency of such a malady. Mercurial aperients, combined with anodynes, when the latter were required to allay pain, were perseveringly employed, together with mucilaginous and acid drinks. The diet consisted of the blandest and most unirritating articles, until the failing powers of life called for a more cordial and sustaining alimentation and medication.

The disease terminated fatally, on the fortieth day, by a profuse hæmorrhage from the bowels.

CASE II.—B. B——, a boy of 10 years, bilious temperament, unusually stout and strong, of previous good health, born of healthy parents, living in wealth and abundance, in a large well ventilated house, presented the signs of purpura in the form of petechiæ on the arms, legs and breast.

There was no pain; the pulse was quick, the heat of surface slightly augmented. The patient did not take his bed, and a medical attendant was summoned on account of the remarkable appearance of what was termed "the eruption," rather than from any apprehension of danger. The patient was directed to take cold drinks and a light diet,

to have his bowels moved daily by a dilute solution of supertartrate of potash, and to exercise in the open air. In two days all appearance of disease had vanished.

CASE III.—S. W——, six years of age, lymphatic temperament, of previous good health, born of healthy parents, living comfortably, was suddenly attacked by purpura.

At my first visit I found petechial spots chiefly confined to the legs, about the ankles especially. Numerous small vibices soon made their appearance on the scalp, followed by ecchymoses on the lining membrane of the cheek. The disease progressed rapidly. In a few days numerous vibices surrounded by petechiæ were to be found on the head, back and limbs. The slightest scratch was immediately followed by an extravasation of blood; a blow, that would not hurt the tenderest infant, developed a dark livid spot; the gentlest cut of a whip or switch left a wheal which lasted for days. Florid petechiæ, dark ecchymoses, and yellowish vibices, were interspersed, with here and there a bleb or bulla, showing the dark blood beneath the cuticle, raising it above the level of the general surface. (*Purpura urticans*, W. & B.) The colour of the various spots evidenced their age: first red, then bluish, and ultimately of a greenish yellow. Hæmorrhages from the gums, fauces, posterior nares, lungs, bladder and bowels ensued. On awakening in the morning, the space between the patient's gums and cheeks was filled with a dark gore. The conjunctiva was speckled.

Notwithstanding the formidable nature of the attack, no pain was experienced. The patient was free from fever, and was usually playful.

The treatment in the early stage was chiefly directed to the restoration of the healthy condition of the alimentary canal. It consisted in mercurial laxatives, designed to expel irritating secretions and to excite the hepatic system to healthy action. Small doses of magnesia and rhubarb were also given, and the free use of diluent drinks and of the fruits of the season was enjoined. Subsequently a tonic regimen was adopted; a generous diet was ordered, and the aromatic citrated wine of iron was freely administered. The disease continued unabated notwithstanding this treatment. Though many of the ecchymoses were absorbed, they were replaced by others, in increased number. The patient continued to decline in strength and flesh. The hæmorrhages from the bowels and bladder were frequent; their quantity varied from one to two or three ounces. Knowing that the terebinthinate preparations enjoyed some reputation in this disease, and having myself observed their efficacy in more active hæmorrhages, I prepared a mixture of mint water and mucilage of acacia, with which was incorporated castor oil and spirits of turpentine, and directed a drachm to be given every four hours. Each drachm contained: *Spir. Terebinth.* minims xv.; *Ol. ricini*, minims xx.

Within 48 hours, a manifest improvement ensued; few extravasations occurred after this, and those that already existed were rapidly absorbed. The remedy was continued for several days, the intervals being lengthened as the case improved. In ten days from the com-

mencement of the terebinthinate treatment all traces of the disease had vanished. No other medication whatever was used during the employment of the turpentine.

Since treating the case just recited, I have encountered two other cases of purpura. I deem it unnecessary to report them in detail, or to say more than that the terebinthinate treatment (preceded in one case by alkalies and rhubarb because of peculiarities manifestly requiring an antacid aperient) was adopted with entire success.

In submitting the above meagre and imperfect outline, I consider it due to a discerning public to state as an apology for its poverty of detail, that its object is to elicit rather than to impart information.

The etiology and pathology of *purpura hæmorrhagica* are confessedly obscure. If, with Willan, we class it with the family of the exanthemata, its obvious extra-vascular specks, vibices and blebs, impart to it a grotesque singularity which proclaims its illegitimacy. The previous good health and general sanitary condition of the five cases which have fallen under my observation, negatives the idea that the disease is allied to the scorbutic affections among which it is ranked by recent writers. Therapeutics also declare it a foreigner, since the remedies suited to scurvy are utterly inefficacious when directed for the cure of purpura.

In consulting authorities on this disease, we find its treatment as uncertain and irregular as its pathology is indefinite and contradictory. The remedy which was successful in the last three cases treated by me is not mentioned with sufficient confidence by writers,* nor has it been used by me with sufficient frequency to establish its efficacy; yet, regarding the disease as essentially dependent upon faulty assimilation, I believe the remedy to which I resorted to be possessed of a potency beyond its popularity.

* Dr. Neligan mentions (*Dublin Quart. Jour.*, Nov. 1845,) four cases of purpura successfully treated by spirits of turpentine, which he regards as an excellent anti-hæmorrhagic. Cazenave, however, regards these cures as dependent upon the purgative effects of the turpentine. William Smith, Esq., (*Assoc. Med. Jour.* Sept. 9th, 1853,) has also reported two cases of purpura, in which the efficacy of turpentine was very striking.—Ed.

CHRONICLE OF MEDICAL SCIENCE.

The translations and abstracts under this head, are made expressly for this Journal.

MATERIA MEDICA AND PHARMACY.

1. *Tincture of the Flowers of Colchicum.*

Dr. Debout has recently called attention in the *Bulletin de Thérapeutique* to the advantages of the flowers of colchicum over all other portions of the plant. He declares that the tincture of the flowers is less variable than that of the seeds or root, and far more efficacious. M. Luskind, a distinguished druggist of Geneva, gives the following directions for this preparation: The flowers are to be plucked before they have faded, on a fine sun-shiny day. They should be placed in a silk bag and pressed. The juice is of a dark brown colour. It must be mingled *immediately* with an equal quantity of strong alcohol, and then set aside for a month. It is then filtered.

This preparation promises to be very uniform in its effects. M. Debout has administered it with success in many cases of obstinate rheumatic neuralgia and in paroxysms of gout.

This is not the first time that the efficacy of the flowers of colchicum has been promulgated. In 1823 Dr. Copland prescribed the flowers in substance, and found them less irritating, and more efficacious than the seeds. Frost and Bushell also employed them. According to the latter, they will cure chronic rheumatism. Bushell adds that they retard the movements of the heart.

2. *Citrate of Magnesia.*

M. Caillet, a pharmacien of Charleville, refers (*Rép. de Pharmacie*, Nov. 1853,) to the discredit into which this medicine, as commonly prepared, has fallen, in consequence of its becoming flocculent, or depositing insoluble citrate, and thus losing its purgative properties.

M. Caillet believes that it is impossible to prepare the effervescing soluble citrate of magnesia extemporaneously, or by simple solution, without the liability of deterioration.

He proposes the following mode of preparation, which is somewhat tedious, but which ensures a stable and reliable medicine:

For sixty bottles (℥xx.) of citrate of magnesia lemonade: Take citric acid, (2,950 gram.,) ℥xc.; rain-water, q. s. Dissolve, and add: Calined magnesia, (495 gram.,) ℥xvj. Dissolve without heat, and

add: Simple syrup, ℥viii., and alcohol distilled from lemon peel, ℥ij. Filter, and add enough filtered rain-water to make ten quarts of perfectly limpid liquid, and put six ounces of this solution in each bottle, then take: Sulphate of magnesia, (1080 gram.,) ℥xxxij.; sub-carbonate of soda, (1200 gram.,) ℥xxxvj. Dissolve these two salts separately in a sufficient quantity of water; filter the solutions, and pour them together in a porcelain capsule, and boil. Wash the magnesian precipitate with a large quantity of water, and place it in the reservoir of a carbonic acid gas machine. Add six gallons of water and charge it with carbonic acid of ten atmospheres; leave it in contact for 36 hours, agitating it from time to time to dissolve the magnesia. Then fill the bottles with this solution.

3. *New Method of Testing Quinine.* By Signor PAGLIARI.

Sig. Pagliari, a chemist of Rome, the inventor of a new hæmostatic compound, has published in the *Corrispondenza Scientifica* of Rome, a procedure for determining the purity of the compounds of quinia with the greatest exactness; and, after repeated experiments, he has rendered the execution of his method extremely simple.

This method consists in heating a small quantity of the preparation of quinine in a spoon over burning charcoal. In a very short time the powder melts, leaving a residue of which we shall speak presently. The examination of this residue must be conducted with the greatest care, for its peculiar tint serves to characterize each compound.

Characteristics presented by perfectly pure sulphate of quinine: *residue of clear ruby colour*; very pure quinine, *residue of the colour of oil of sweet almonds*; citrate of quinine, *residue of clear citron colour*, with excess of acid, *dark citron colour*; valerianate of quinine, *residue of the colour of the preparation itself*.

When either of these preparations is adulterated with foreign matter, the residue, after fusion, will be wanting in polish and transparency, and will present a blackish, porous appearance. If they are mixed with cinchonine or salicine, they become opaque; to be certain of the presence of salicine, concentrated sulphuric acid may be added, which will give rise to a red colour.

These trials should be made with about a half a grain of the salts in question. The author hopes that these simple experiments will add one more obstacle to the falsifications of the salts of quinine.

4. *Syrup of Elderberries.*

Dr. Worthington, of Pennsylvania, proposes in the last number of the *West Chester Medical Reporter* a syrup of elderberries (*sambucus canadensis*) as a substitute for the compound syrup of sarsaparilla, which is so frequently adulterated and inert. He prepares this remedy by adding sixteen pounds of white sugar to two gallons of the expressed juice of elderberries, and boiling to the consistence of a syrup. When the syrup is cool, an ounce of fourth proof French brandy is added to each pint of it. The dose is half an ounce, thrice daily.

Dr. Worthington was induced to employ this remedy by the recommendation of Dr. Stratton, of Mt. Holly, N. J., who has long used it as a substitute for sarsaparilla. Dr. Worthington has also prepared a compound syrup of elderberries by adding to the above formula a decoction of four ounces of guaicum wood, and three ounces of senna leaves in three pints of water.

MEDICAL PATHOLOGY AND THERAPEUTICS.

5. *Of the Cerebral Complications of Acute Articular Rheumatism.* By M. VIGLA.

In systematic treatises on pathology as well as in monographs, authors have hitherto omitted an interesting complication of rheumatism,—the cerebral complication. M. Vigla has recently published in the *Archives générales de Médecine* an interesting paper in which six cases of this description are described.

During the space of three months, this physician observed three cases in which death supervened in the course of acute articular rheumatism, in consequence of cerebral complication, and two other cases in which recovery took place. The fact that five cases of this nature were observed in three months proves that this form of disease is not extremely uncommon.

During 1852, M. Vigla treated 65 cases of acute rheumatism at the *Maison de Santé*. In one thirteenth of these, cerebral complications supervened. One in 22 of the patients died; a most remarkable result, for uncomplicated rheumatism is rarely fatal primarily; but when cerebral disorder is superadded to the disease, its fatality is greatly increased. M. Bourdon has collected in a memoir not yet published, 39 cases of cerebral complication of rheumatism, of which 30 died.

M. Vigla groups the cerebral symptoms we are considering in the following manner.

1. Simple delirium, resembling the sympathetic or nervous delirium which occurs in many acute febrile affections, whether internal or traumatic:—*rheumatism complicated with delirium*.

2. Delirium accompanied by most of the symptoms, and probably by the lesions also, of meningitis:—*rheumatismal meningitis* of authors.

3. A sudden and unforeseen ataxic condition, which is soon followed by a mortal coma or collapse:—*rheumatic apoplexy* of Stoll and some authors.

6. *Prognosis of Variola.*

During several epidemics of small pox which have appeared in the

last few years in Western Flanders, Dr. Van Oye has satisfied himself of the justice of the remark of Rosenstein, that when, in the suppurative stage of variola, the arteries of the neck and head beat strongly, and, at the same time, the radial pulse is feeble, the death of the patient is to be expected. This want of harmony in the arterial pulsations was almost invariably observed in children who succumbed to smallpox; it was less striking in adults.—*Revue de Thérapeutique*, Dec.

7. Epidemic Typhoid Fever.

In a late number of Malgaigne's, *Revue Médico-Chirurgicale*, we find an interesting summary of the comparative results of five different methods of treatment employed by Dr. Secrétain, in an epidemic of typhoid fever prevailing in the commune of Gannat. M. Secrétain treated 123 patients; the general result indicates, in the first place, the gravity of the epidemic influence; there were 92 recoveries, and 31 deaths—one fourth!

Of these patients, 49 were men, 58 women, 16 children. As regards the severity of the disease, the cases may be distributed into three categories. There were 52 grave, 25 mild, and 42 cases of ordinary severity.

Eight of these patients had been previously affected with smallpox. This fact is important in reference to some recent hypotheses in relation to the transformation of fevers.

In 28 cases, a pure expectant treatment was adopted. Of these, 18 were mild, 8 of mean severity, 2 grave. By this treatment M. Secrétain lost only 2 patients. This result appears very satisfactory if we look only at the ratio; but Dr. Secrétain regarded it as deplorable, for the only patients who were gravely ill, died.

In 60 cases (26 grave, 24 mean, 10 mild), Dr. Secrétain adopted the practice which it has been agreed to call *treating symptoms*. There were 16 deaths, including more than half of the grave cases.

An apparent remittency in the symptoms induced him to administer quinine in 42 cases (14 grave, 22 mean, 6 mild). There were six deaths, so that we still have a fatal issue in nearly one half of the grave cases.

Seven patients (5 grave, 1 mean, 1 mild), were treated exclusively by cold water, *intus et extra*; not one died.

The evacuant method had less encouraging results. In 12 cases, of which 9 were of a grave character, 8 died.

Seven cases (6 grave, 1 mild), were treated on the antiphlogistic plan. Six died. M. Secrétain only employed this method in hopeless cases.

The number of patients in each of these categories is too small to warrant any positive conclusions; still we may notice the apparent efficacy of the hydrotherapeutic method, and the consolatory results of quinine in some of the severest cases.

8. *Coup de Soleil*. By Dr. CARTWRIGHT, of New Orleans.

[Some strictures having been made upon a remark by Dr. Cartwright that he had been "in the habit of curing apoplexy almost as readily as intermittent fever," that physician publishes in the January number of the N. O. Med. and Surg. Journal some explanations of this rather startling assertion, with additional comments on the pathology and treatment of apoplectic forms of disease. Want of space compels us to refer the reader desirous of learning the views of this distinguished author to his original paper; we must content ourselves with extracting the following parallel between the different phases of sun stroke.]

"Some of them, (*i. e.*, apoplectic diseases,) I admit, are from necessity fatal, owing more, perhaps, to the shortness of time given to act, than to any thing in their nature. Asphyxia, for instance, from the inhalation of carbonic acid gas, apoplexia fortissima and that form of coup de soleil, which Dr. Dowler, in an unpublished work, calls *solar asphyxia*, often occurring in this warm latitude and extinguishing life in thirty minutes, and altogether different from the coup de soleil of more northern latitudes, which he calls *solar exhaustion*, are incurable from their falling into an incurable state before medical aid can be obtained. Whereas that form of coup de soleil, properly called *solar exhaustion*, is even more quickly cured by the proper remedies, than a common intermittent fever, and is almost as fatal as solar asphyxia if improperly treated. Laudanum, brandy, cold affusions and rest in a horizontal position, will quickly cure coup de soleil produced from mere solar exhaustion. It is, in fact, a mere fainting, the face being pale and the skin cold, or not above the natural temperature. In solar *asphyxia*, the face is flushed and the skin burning hot to the touch. Dr. Dowler, by actual experiment, has found the temperature as high as 112 degrees of Fah., the sphincters relaxed, and mind and body utterly insensible to impressions. In cases of this kind, post mortem examinations furnished no evidences sufficient to account for the symptoms, or fatal termination, within the cranium; but sanguineous infiltration was so abundant in the substance of the lungs, that instead of the usual crispy feel under the knife, they cut, says Dr. Dowler, like a mass of jelly. I mention these facts, not to anticipate Dr. Dowler's intended work, but to give interest to it, if I could, and to hasten the publication of his vast and highly important contributions to science. They demonstrate that the role the brain plays in apoplexy, attended with general and complete insensibility to pain or impressions of any kind, is only secondary—that it is not properly a disease of the brain."

9. *On Gout in the Uterus*. By Professor SIMPSON.

[In a most instructive paper on the gouty diathesis, by Dr. Begbie, which appears in the last number of the *Edinburgh Med. and Surg. Journal*, we find the following letter from Dr. Simpson.]

"I have seen several cases of inflammation of the uterus, or rather

of the uterine region, of the nature of simple gout, or rheumatic gout ; or, at all events I believed these inflammatory attacks to be of this special pathological nature, in consequence of their coexisting with, or following immediately upon the presence of undoubted gout in other parts of the system.

“ In one instance which I saw repeatedly last summer, the attack of uterine gout came on during the existence of a marked prolonged fit of the same disease in the fingers, &c. The principal organic effect, as ascertained by vaginal examination, was effusion into the cellular tissue of the broad ligaments, (*pelvic cellulitis*,) giving rise to tumefactions of considerable size around the sides of the uterus. This pelvic effusion was gradually absorbed under some local antiphlogistic means, and the use internally of colchicum and other medicines.

“ About the same period I visited repeatedly, at some distance from town, a lady, hereditarily predisposed to gout, who, after some prolonged constitutional derangement, was seized with excruciating pain, followed by redness and swelling in and around the right ankle. The agony attendant on this attack was so great that she could not move the limb in the least for two or three weeks. There were large quantities of oxalates in the urine. When recovery, however, did begin, convalescence was very rapid for two or three weeks ; when she travelled home to her own residence, a journey of nearly a hundred miles. Shortly after arriving, she was seized with severe pelvic pain ; and two days subsequently there was a large inflammatory swelling in the right broad ligament, and at the same time much effusion of serum into the cellular tissue of the upper portion of the posterior wall of the vagina. This last formed a tumour like an orange, or larger, projecting backwards into the rectum. Under leeches and mercury these swellings subsided, but with a rapidity seldom or never seen in common cases of similar inflammatory swellings attendant upon common pelvic cellulitis.

“ In the first case of uterine gout which I ever saw (now some years ago) the lady suffered repeatedly and metastatically in the uterus, simultaneously with, and sometimes after, the appearance of the disease in the extremities. The uterus was very large ; was fixed as if there had been perimetritis ; and in the attacks which I watched, it appeared to me that the wall of the organ and the peritoneal surface were usually the seats of the morbid action. In her there was no effusion into the neighbouring cellular tissue.

“ In none of the instances of gout of the uterus which I have watched, have I seen the inflammatory action attack the neck of the uterus, or the mucous membrane of the organ. Rheumatic inflammation seems to do so.”

SURGICAL PATHOLOGY AND THERAPEUTICS.

10. *On Osteo-Myelitis.* By M. CHASSAIGNAC.

Inflammation of the medullary system of the long bones has hitherto been investigated in a very superficial manner, so far as the human subject is concerned. M. Reynaud* has treated of this affection, indeed, but only in those cases in which it succeeds amputations. As these observations refer to patients who succumbed to operations in which the medullary cavity was opened, it was difficult to separate what depended on purulent infection from the results of osteo-myelitis itself.

The difference between the study of inflammation medullary tissue of limbs which have been subjected to amputation and the examination of this same process in the entire bone, was first understood and pointed out by M. Flourens, in his admirable essay on the development of bone, published in 1841. Before that time, all those who repeated the experiment of Troja sawed the bone transversely, and then introduced a probe into its medullary canal to destroy its internal membrane. M. Flourens, on the contrary, preserved the bone entire, and simply made a small perforation, through which destructive agents were introduced into the canal. By this method it was possible to obtain a much more exact knowledge of the process of regeneration of bones after the mortification of their medullary membrane. By studying cases of osteo-myelitis unconnected with amputations, I have endeavoured to do for human pathology what the learned academician I have quoted did for experimental pathology.

(From the observations and considerations contained in his memoir, M. Chassaignac deduces the following conclusions.)

1. Osteo-myelitis is accompanied inevitably, at a very early period, by acute suppurative periostitis and diffused phlegmon.

2. In suppurating osteo-myelitis the separation of the medullary membrane from the osseous wall is a constant phenomenon.

3. The mechanism of the propagation of osteo-myelitis from one portion of a limb to that which is above it, consists in the perforation of the articular cartilage, the disorganization of the synovial membrane, and the rupture of the cul-de-sac above this membrane.

4. Osteo-myelitis is always accompanied by purulent arthritis. The articulations are attacked from below upwards, as a general rule. Pu-

* Although M. Reynaud's memoir is the only one which contains anything like a complete history of osteo-myelitis, useful observations on this subject have been made made by Dubrueil, by Macdonald, (*de callo et necrosi*), by Thomson, in his work on inflammation, and by Craigie in his *Elements of Path. Anat.*, ch. xviii., p. 564, and also by Howship.

purulent deposit in the joints rarely occurs before the twelfth day of the disease.

The following conclusions relate to the diagnosis :

1. A hard and painful œdematous swelling, terminating abruptly in the course of a limb, is a pathognomonic characteristic of this disease.

2. The sub-aponeurotic pus, in osteo-myelitis, is constantly mixed with oil globules.

3. The differential characteristics of abscess under the periosteum and of osteo-myelitis are the following: *a.* In sub-periosteal abscess fluctuation precedes the doughy, œdematous condition of the soft parts, (*empâtément*;) in osteo-myelitis the reverse obtains. *b.* The painful œdema of osteo-myelitis terminates abruptly by a hard defined edge, at the point at which the diseased portion of bone ends. *c.* Osteo-myelitis is accompanied by diffused phlegmon and suppurative periostitis; sub-periosteal abscess causes neither suppuration of the medullary canal or purulent infiltration of the limb. *d.* Osteo-myelitis is propagated from one bone to another; abscess beneath the periosteum usually is limited to the bone on which it first makes its appearance.

4. The distinctive features of osteo-myelitis and diffused phlegmon are: *a.* The nature of the œdema; *b.* The presence of oil globules in the pus.

The following conclusions relate to the treatment :

1. In osteo-myelitis, incisions should be practiced as a means both of diagnosis and therapeutics. If the disease is suspected only, the incisions should be made through the aponeuroses enveloping the bone. If pus is found beneath this sheath, the knife should be carried directly down to the bone.

2. In osteo-myelitis, amputation affords the only chance of safety. It should be practiced as soon as the diagnosis is positively made. The best method, in these cases, is the flap operation. The place of election is the first healthy articulation above the diseased bone.

3. Amputation is contra-indicated in cases in which the pus is of bad quality, in cases of in which the disease has invaded several limbs, or when there is a general typhoid condition.—*Comptes rendus*, T. xxxvii., p. 777.

11. On Congenital Fractures.

At a late meeting of the Surgical Society of Paris, M. Danyau presented a new-born infant whose right tibia formed an angle at its inferior third, the angle projecting forwards. There was a cicatrix in the skin at the level of this angle, considerable retraction of the tendon of Achilles, and the little toe was wanting on both feet; the fibula was entirely absent on the side on which the angular deformity existed, and the foot was consequently everted. Dr. Danyau considered the angular displacement of the tibia the result of a non-consolidated intra-uterine fracture.

At an ensuing meeting, the same accoucheur presented another case of fracture of the tibia during intra-uterine life. The right tibia

formed an acute angle, at its middle third, projecting forwards. At the level of the union of the fragments, there was a cicatrix which apparently indicated that the bone had pierced the integument at the moment the fracture occurred. There was also retraction of the tendo Achillis, talipes valgus, and absence of the two last toes. The fibula, last two bones of the metatarsus, and some of the bones of the tarsus were also wanting. The mother of this child received a violent blow upon her abdomen in the last month of her pregnancy. The child having been in the first position of the vertex, the right leg was probably in relation with the anterior wall of the abdomen. Dr. Danyau added that he had learned that the mother of the first patient he had presented, had a severe fall on a stair-way during her pregnancy.

M. Chassaignac remarked that he was attending a child, who likewise presented a congenital fracture of the tibia. The limb was considerably atrophied; the leg was kept flexed on the thigh. The fracture in this case also coincided with a vice of conformation; three toes were wanting.

These cases gave rise to a protracted debate. We shall pass over the remarks of the other speakers in order to quote entire the sound observations of M. Broca.

“M. Chassaignac has said that in his patient, as well as in those of M. Danyau, congenital fracture coincided with a vice of conformation. This coincidence is not the result of chance, and I will add that, in cases of this sort, the division of the bone is not, in all probability, the result of fracture.

“I admit the possibility of fractures produced during parturition, but I entertain doubts of the existence of intra-uterine fractures. It appears to me to be certain, at all events, that many of the cases adduced as examples of congenital fracture, depend upon very different causes. Dr. Depaul, who has examined this subject, has proved that these so-called fractures are often the consequence of incomplete or vicious development. Instead of being formed of a single piece, the diaphysis of certain bones is formed by several superimposed segments, united simply by a fibrous substance, and the abrupt terminations of these segments presents some analogy with the appearance of the fractured extremity of bone. Some foetus have many of these so-called fractures on each limb. M. Notta has presented such a foetus to the Anatomical Society.

“The cases of MM. Danyau and Chassaignac appear to me to be due, also, to imperfect development. To my mind, the bones which are said to have been fractured never formed a solid shaft, the continuity of which was subsequently broken; but these bones were composed of two distinct pieces from their origin. I cannot believe that traumatic agents can affect the foetus in the cavity of the amnion. As to the diminution of strength which has been alleged to result from the absence of the fibula, it appears to me of little moment, the use of the fibula being to strengthen the ankle-joint rather than the leg. The existence of a cicatrix is a more serious objection. I will say, however, that it is difficult to recognize cicatrices which date far back in intra-

uterine life. Thus, in congenital amputations, it seems as though a cicatrized stump was before us, and yet commonly there has been no amputation, but only incomplete development of the limb.

"I presented, some time ago, to the society a case in which both tibia projected under the skin. The prominence was at the same level on both sides. The chances of traumatism are inconsistent with such regularity, and, moreover, the inferior fragment was wanting on both sides. Here was evidently no fracture. The free extremity of the tibia might have perforated the skin by a kind of ulceration, and given rise to the cicatrix on which M. Danyau relies."

12. *Minié Rifle Ball Wounds.*

The discussions on the *quæstio vexata* of the characters of wounds of entrance and of exit will doubtless be resumed with the new era in the history of warfare produced by the introduction of the Minié rifle into general use. We believe that this formidable weapon is not yet adopted in the U. S. service, but most of our readers are familiar with descriptions of it. If our recollection is not at fault, it propels a very large conical ball with fatal precision to a distance of not less than nine hundred yards. If Mr. Guthrie's opinion is correct that a wound from a large ball, which "passes clean through a man," is less dangerous than one produced by a smaller missile, making no counter-opening, we should expect that the conical rifle-ball, which penetrates the strongest cuirass, would make a wound of a less formidable character than that of the round musket-ball.

The war in the East promises to elicit pretty extensive information on this subject; but we have the first instalment in some "Contributions to Clinical Medicine and Surgery," in the *Dublin Quarterly Journal of Medicine*, for November, 1853.

A lad of 17 received a wound on the dorsum of the foot from one of these conical balls, discharged at a distance of several hundred yards by one of a practising party. A single wound existed, but it was thought the ball might have rebounded through this opening! "been rejected by the elasticity of the metatarsal bones!" A fulness, however, existed in the sole of the foot a little behind the ball of the great toe. "The treatment consisted in the action of the water battery (?) on the foot, and the administration of the anti-tetanic *pile*." (?) . . . "consisting of a grain of calomel, one or two grains of James's powder, one grain of aloes, one of ipecacuanha, and an eighth or a quarter of a grain of opium." This formula was suggested by Mr. Peile, and is said to be "a most valuable medicine in lacerated, contused, and punctured wounds." What is the meaning of the *action* of the water battery? We presume the application of irrigation, by the syphon probably. But what is the meaning of the "anti-tetanic *pile*?" Is it a misprint for *pill*? or is the term used in deference to the gentleman who suggested the remedy? or is it intended to be suggestive of the *hæmorrhoidal* tendency of the calomel, antimony, and aloes, which form the pile?

However, let us follow the treatment of the case. Mr. Tuffnell took charge of it, and adopted the more certain "anti-tetanic" treatment of cutting out the ball.

We had hoped to be somewhat enlightened in regard to the characters of the openings and counter-openings made by balls, but we are only tantalized by a concluding suggestive question to which no answer is vouchsafed; "Had it traversed the foot what would have been the form and appearance of the exit." The smallest "contribution," however, is thankfully received, and we have to record the fact that the entrance wound "presented more the character of what I may term a clean lacerated slit about one and a half inch long."

13. *On the Bite of the Rattlesnake, and the means of neutralizing its Venom.* By Dr. BRAINARD, M. D., of Chicago.

[In the *Compte-Rendus* of the Institute of France for the 28th of last November, we find the following communication from Professor Brainard, who has recently visited Paris. Dr. B. proposed to repeat the experiments he details before a committee composed of MM. Dumeril, Magendie, Flourens, et Pelouze.]

"The experiments upon the effects of the poison of the rattlesnake were made chiefly with pigeons. The snakes were of the species *Crotalophorus trigeminus*, whose bite is considered less dangerous than that of the other crotali, in consequence, probably, of their smaller size.

"After describing the symptoms exhibited by animals after they were bitten by these serpents, the author details the alterations revealed by a necroscopic examination. He notices particularly a change in the red globules of the blood, which approached a spherical form; 2d. The abundance of white corpuscles, and their tendency to group together; 3d. The remarkably fluid condition of the blood contained in the cavities of the heart when death supervened rapidly. In mammals, when death did not occur promptly, a tendency to hæmorrhagies from the mucous surfaces was observed, and occasionally sub-cutaneous petechial spots.

"Among the symptoms observed during life, one of the most apparent is a constriction of the glottis. Tracheotomy, so useful in poisoning by strychnia, is naturally suggested by this fact. It retards but does not prevent death.

"Cupping-glasses over the seat of injury appeared to be of some efficacy, and by retarding the absorption of the poison, they permitted the employment of agents calculated to neutralize it. Dr. Brainard had experimented with solutions of lactate of iron and iodide of potassium which were made to act upon the wound and surrounding parts by infiltration. They were injected by means of a small syringe. By means of these two substances, employed at an early period and with requisite precautions, the lives of animals which would otherwise have succumbed, have been saved in the majority of cases. Dr. Brainard regards the action of the iodide of potassium as more certain than that of the lactate of iron."

14. *On the Treatment of Aneurisms by the Injection of the Perchloride of Iron.*

We have not space in the present number for an analysis of M. Malgaigne's report on this method of treating aneurisms, which was recently read to the Academy of Medicine of Paris, and which led to an interesting debate in which the leading French surgeons discussed the merits of the new operation. On the present occasion we shall simply present the additional facts which have been reported since we last referred to the subject. In the first place, however, we will briefly recapitulate the eleven cases, and their results, which were detailed in the January number of this Journal: 1. Case of M. Deslongchamps, (sub-orbital, successful); 2. Niepce, (popliteal, successful); 3. Serres, (brachial, successful); 4. Velpeau, (brachial, ligature); 5. A Paris surgeon, X, (brachial, death); 6. Malgaigne, (brachial, amputation); 7. Alquié, (ulnar, ligature); 8. Lenoir, (popliteal, death); 9. Adams, (post. tibial, successful); 10. Soulé, (femoral, ligature); 11. Soulé, (post. tibial, unsuccessful.) Or, briefly, eleven cases, of which four were successful, five required a secondary operation, and two terminated fatally.

In November last, M. Dufour,* surgeon at Lectoure, operated by the new method on a large aneurism of the right primitive carotid. Two injections were practiced. The second appeared to be successful, but inflammation speedily set in, then gangrene; the tumour burst, and the patient expired almost instantly from hæmorrhage.

Dr. Barrier,† surgeon to Hôtel-Dieu of Lyons, in the latter part of August, injected on two occasions with the interval of a fortnight, seventy-five drops of the perchloride into a large aneurism of the innominate artery. Symptoms of inflammation supervened after the second operation, but these symptoms were fortunately limited to the tissues surrounding the tumour. The patient left the hospital in October in the same condition as when he entered.

M. Jobert,‡ the celebrated surgeon of Hôtel-Dieu of Paris, has operated on a popliteal aneurism by injection. The details of his case are not yet made public. The termination was unfortunate. The tumour was invaded by gangrene, and the patient succumbed.

Mr. Syme, of Edinburgh, has also attempted the new operation. His case was one of large thoracic aneurism, pointing through the sternum, in which any operation was hopeless. We have no details except that the instruments were not well adapted for the occasion, and that the patient afterwards died.§

We are happy to be able to terminate this recital of disasters by a successful case.|| It refers to an aneurism of the brachial artery caused

* *Journal des Connaissances.* Dec. 1, 1853, p. 624.

† *Bulletin de l'Académie.* T. xix., p. 102.

‡ *Ibid.*, loc. cit.

§ *Med. Times and Gazette.* No. 167. N. S.

|| *L'Union Médicale.* Nov. 19, 1853.

by venesection. The tumour was of the size of a large walnut. It pulsated synchronously with the radial artery. Upon compressing the humeral, the pulsations ceased entirely. Upon compressing the radial they were augmented in force. Compression of the ulnar artery seemed to exert no effect on the tumour. On the 21st of July, M. Vallette, of Lyons, in the presence of a large number of surgeons, punctured the tumour with a fine trocar, and injected 13 drops of a solution of perchloride of iron prepared by M. Burin. The humeral artery was obliterated by a tourniquet, and M. Pétrequin compressed the ulnar and radial arteries. The tumour became hard immediately after the injection, and the hand of the affected limb was cold. Compression on the vessels below the tumour was maintained for ten minutes; the tourniquet was allowed to remain for an hour. When it was removed there was no pulsation in the tumour. There was slight pain during the day after the operation, but no inconvenience was experienced subsequently. The tumour commenced to diminish in size on the 27th of July. On the 31st the tumour was diminished to half its original volume, and the patient moved his arm freely. On the 12th of August the tumour was of the size of a cherry; after it had been examined by Drs. Desgranges, Barrier and Pétrequin, the patient left the hospital.

On a future occasion we hope to examine the facts which we have here briefly enumerated, and to prove that the disastrous results of several of the cases to which we have referred were due to a neglect of the simplest precautions, or to the obviously hopeless character of the lesions which were present.

15. *Case of Lithotomy. Nucleus of the Stone a piece of the Patient's Trowsers.*

Dr. Dunsmore, in the Edinburgh "Monthly Journal of Medical Science" for January 1854, gives an operation of lithotomy performed by him on the 4th of November 1853. The history of the case, which is very curious, is as follows: The patient, William Howell, eleven years before his admission into the Royal Infirmary, slipped his foot while stepping from the Bass Rock into a fishing boat, and fell backwards on the "row lock" or "throne pin," which entered the perineum near the anus. Severe inflammatory symptoms supervened, and a large abscess formed in the perineum, which burst externally, and shortly after this he observed his urine to flow through the opening. He gradually regained his strength, and after a lapse of five months the perineal wound closed. Shortly afterwards he observed the stream of urine to be suddenly interrupted as if by some foreign body, but upon examination with the sound nothing was detected. Two or three years after he was again sounded, when a calculus was discovered, and after suffering greatly for years, he consented to be operated on. Dr. Dunsmore extracted a stone two inches long, one and a half broad, and three fourths of an inch thick. Upon making a section of the calculus, it was found to consist of phosphates, and contained in its centre an oval cavity within which was a portion of woollen cloth, the

size of a filbert. The cavity was considerably larger than the cloth, which had apparently shrunk after the phosphate had been deposited on it, the urine passing off through the walls by exosmosis.

OPHTHALMOLOGY.

16. *On the Dangers of Cauterization in Purulent Ophthalmia.* By M. DESMARRES.

[If there is one part of surgery in which the rashness of ignorance and the danger of limited knowledge is exemplified more than in others, it is the treatment of inflammations of the eye. We have long been struck with amazement at the routine practice adopted by many practitioners who were otherwise judicious, in this speciality. Medical men are not ignorant of the differences in texture of the component parts of the eye and of the influence which these structural diversities must exert upon pathological processes, but they seem to be forgetful of them. Whatever the disorder implicating the external tunics, it is met by the inevitable caustic. We have been led to regard the indiscriminate use of the nitrate of silver as a great evil, and we gladly give admission to the following remarks on the subject by M. Desmarres, whose opinions, deduced from an experience which probably equals that of any living ophthalmologist, are entitled to the highest respect.]

“A child two weeks old was brought to my consultation, with purulent ophthalmia, which commenced in the right eye, and had existed for eight days. The cornea was gone, there was hernia of the iris, and the lens had escaped.

“On the second day of the disease, according to the mother's account, there was much suppuration, the lids were swollen, but the cornea was clear. The physician who was summoned cauterized the lids, and from that moment the swelling diminished, and the eye became perfectly white.

“Six days afterwards the left eye became involved; the conjunctiva was red, the lids tumefied, and pus escaped freely when they were separated. I feared that cauterization would destroy the cornea of this eye also, and accordingly scarified the conjunctiva of the globe and lids freely, and directed frequent injections of a feeble collyrium of alum. The next day the scarifications were repeated; the swelling had nearly disappeared, and on the third day the inflammation was completely subdued.

“The pencil of nitrate of silver is a two edged sword, and in some hands a most dangerous weapon in inflammations of the eye. My experience on this point makes me perfectly positive, and I do not

hesitate to affirm that it would be well if this remedy had never been employed in eye diseases, so greatly has it been abused. Whether the cornea is the seat of abscess or ulceration, the disease chronic or acute, the iris protruded or not, the caustic is applied, without caution, the surgeon forgetting that a very different treatment is requisite and that the use of caustic is full of danger.

“A patient is suffering from catarrhal ophthalmia—caustic is applied whether the cornea is involved or not, whether or not it is capable of resisting traumatic inflammation.

“But it is in purulent ophthalmia, especially, that the greatest abuse is made of the solid nitrate; and it is in this affection that it produces the most disastrous consequences.

“If the conjunctiva is cautiously touched, in points remote from each other, in the incipency of the ophthalmia, benefit results, for we then produce a relatively slight traumatic ophthalmia for a most dangerous inflammation. But when the solid caustic is applied extensively after pus has begun to form, and there is considerable tumefaction, the mucous membrane being pale, and especially, if there is no certainty that the cornea is not involved, then, certainly, the eye is exposed to the risk of destruction in a few hours. I have often witnessed this melancholy result, but never in a more striking instance than that of a young man who had already lost the left eye by purulent ophthalmia, and whose right eye was invaded by the same disease. At a consultation at which I was present, there apparently existed only an intense conjunctivitis, without appreciable alteration in the cornea; vision was perfect. The palpebral conjunctiva was freely cauterized. The next day the cornea was completely destroyed, the iris was prolapsed, and the lens escaped the moment an attempt was made to separate the lids.

“My aim, in these remarks, is simply to induce practitioners to be cautious in the use of the nitrate of silver, and if I attain this end I shall be well satisfied. I am convinced that cauterization with the solid nitrate is often dangerous, and that it is a remedy which cannot be employed too cautiously. I know that many surgeons will exclaim against this doctrine, and assert that they have cured this and that affection, and have met with no accidents. I reply that I, like themselves, and, assuredly, oftener than they, have had occasion to judge of the effects of this remedy, and fortified by my experience, I am certain that the *lapis infernalis* should be applied in rare cases, and with the greatest reserve.—*Gazette des Hôpitaux*. No. 138. 1853.

THERAPEUTICAL RECORD.

Amaurosis.—Dr. Griffin, of Limerick, (*Dub. Quart. Jour.*, Aug. 1853,) strongly insists upon the efficacy of strychnia in cases even of

complete amaurosis. He prefers internal administration to the endermic method. He adduces one case of complete amaurosis following retinitis which was successfully treated by eight grains of strychnia spread over a space of about eight weeks, after leeching, counter-irritation and mercury had been employed in vain.

Carcinoma.—In a recent number of the *Revue Médicale*, Dr. Vignolo advocates, the destruction of carcinomatous tumours by means of a caustic consisting of a mixture of safran and concentrated sulphuric acid, forming a soft but non-diffuent paste. The peculiar efficacy of this caustic is supposed to depend upon its intimate combination with the tissues, which is made evident by the woody hardness which results from the carbonisation of the cauterized parts, and the absence of all hæmorrhage or inflammatory reaction. To the facts already known which tend to attribute a certain superiority to this caustic, M. Vignolo adds the history of a cancerous tumour of the neck, which was removed by three applications of the safrano-sulphuric caustic.

Fever—Intermittent.—Dr. Merrill reports (*Memphis Med. Recorder*, Jan.,) 152 cases of periodic fever, all of which were cured by a solution containing gr. j. of sulphate of quinia and gr. jss. of sulphate of zinc, with enough of elixir vitriol to effect solution. This remedy was given in drachm doses four or five times before the expected paroxysm, the patient being kept in bed and supplied with warm drinks. The zinc often caused considerable nausea. It was in some cases combined with the tincture of jessamine, without appreciable advantage. The jessamine alone proved insufficient to effect a cure.

Fever—Intermittent.—Drs. Cazin and Miergue have lately called attention to the medicinal virtues of a little plant, the hawkweed, (*Hieracium pilosella*,) which was formerly employed in passive hæmorrhages, gravel, dropsies, etc., but which long since fell into oblivion. Dr. Cazin reports that the country people, who abandon popular traditions with less readiness than men of science, still employ this plant, and that he has known a strong decoction of it to act upon the kidneys and to induce the expulsion of gravel. M. Miergue, on his part, notices the remarkable anti-periodic properties of hawkweed. During five years he has used it among his poor patients with ague, and with almost uniform success.

Gleet.—Dr. Lazowki (*Rep. de Pharm.*) having noticed the good effects of ergot in paralysis and atony of the bladder, was led to employ it in blenorrhœa, which affection he attributes to a relaxed and atonic condition of the prostate and canal of the urethra. He professes to have cured many cases of long standing gleet by this means. The advantages of the ergot were still more manifest when it was combined with iron: R. Pulv. ergot., 3j.; Ferri sulphuret., gr. j.; Vanillæ pulv. et camph. pulv. aa., gr. ʒ. Ft. chart. xx. A powder morning and evening.

Hare-Lip.—The utility of mechanical contrivances as adjuvants in the treatment of complicated hare-lip is perhaps not fully appreciated by surgeons. When the soft parts alone are divided they usually unite readily, but when the maxillary bones are separated, and the intermaxillary median tubercle is prominent, great difficulties are often experienced in maintaining coaptation. We read in the *Bulletin de Thérapeutique* that M. Ferd. Martin, an ingenious mechanic of Paris, has constructed an apparatus consisting of two pads for the lateral portions of the cheek and a small pad for the central tubercle, the whole united by steel springs, which is of great service in these cases. By means of it, M. Robert, on a child 15 months old with complicated hare-lip, brought the separated edges of the cleft palate almost into contact in two months, although they were previously separated half an inch, (2½ centimet.) The lip was then operated upon with perfect success.

Hæmorrhoids.—In cases in which piles bleed profusely, and induce debility and anæmia, Dr. Oke (*Assoc. Med. Journal*, Aug. 1853) has found turpentine the most efficacious remedy in restraining such hæmorrhage. He recommends the following formula: Ol. terebinth, 3ss.; tinct. kino, syrup. zing., aa 3j.; aq. cinam., aq. font. aa 3iij.; mucilag. acac., q. s. This dose may be repeated two or three times a day.

Hydrocele.—In preference to the common method for the radical cure of hydrocele by the injection of stimulating fluids, Prof. W. Parker (*N. Y. Jour. of Med.*, Jan.) employs cauterization of the internal surface of the tunica vaginalis with the solid nitrate of silver. He adduces four cases in support of this mode of treatment, in three of which it was attended by considerable pain and inflammation.

Mr. Lloyd, of St. Bartholomew's Hospital, employs a somewhat similar treatment. After evacuating the fluid, he introduces a probe thickly smeared with red precipitate ointment, and moves it about in the interior of the sac. The plan seems to succeed very well. (*Vide Med. Times and Gaz.*, June 23d, 1853.)

Phthisis.—Dr. Turnbull (*Assoc. Med. Jour.*, June 24th, 1853,) warmly recommends the use of sugar of milk in the treatment of tuberculosis. He was led to use this remedy partly by the consideration of the fact that asses' milk, which has always enjoyed a reputation in pulmonary disease, was chiefly remarkable for the large proportion of milk sugar which it contains, and partly by deductions from the views of Liebig in regard to the uses of the azotized, or plastic, and non-azotized, or combustive elements of food. Sugar of milk is an article belonging to the latter class, and is, moreover, readily digested, and possessed of a great affinity for oxygen. It may therefore be of use in supporting the slow combustion which is more or less impeded in pulmonary disease.

Pneumonia.—Dr. Fiebig (*Organ. für die gesammte Heilkunde*, ii. 3, 1853,) employs acetate of lead in those cases of pneumonia in which the usual treatment is insufficient. This salt is also indicated, accord-

ing to Dr. Fiebig, in tuberculous subjects, in the aged, and in cases in which pneumonia is complicated with abundant diarrhœa.

Pneumonia.—Dr. Heusinger highly recommends (*Deutsche Klinik*, No. 24, 1853,) the administration of infusion of digitalis in pneumonia especially in the case of old and feeble patients on whom the contra-stimulant and antiphlogistic treatment might act injuriously. If there is pleuritic complication Heusinger applies a few cups, and then orders a table-spoonful of infusion of digitalis every hour until its physiological effects are produced, after which the same dose is given every two hours. In patients treated by this method, he states that convalescence is over in a fortnight in the great majority of cases.

Pott's Disease.—M. Piorry has recently published a memoir on this subject, in which he establishes that the affection generally designated *Pott's disease*, which consists of a tumour of the vertebral column with paralysis of the rectum, bladder, and lower limbs, comprised many different diseases, and that its treatment by moxas, setons, and cauterization was often empirical and injurious. The capital point, says M. Piorry, is to detect the disease in its incipency, and this can only be done by pleximetry. M. Piorry reports forty cases. The treatment which he employs (consisting of the use of phosphate of lime and iodide of potassium, repose, and good dietetic and hygienic management) was completely successful in twenty of these, and produced some amelioration in many of the others. In some of the cases which were cured, abscesses already existed.

Purpura.—Mr. Grantham reports (*Assoc. Med. Jour.*, Sept. 9th, 1853,) three cases of purpura hæmorrhagica of a very serious description, in which gallic acid, administered in five grain doses every two or three hours, proved to be a very valuable remedy. The compound rhubarb pill was given as an aperient and the dietetic and general treatment was carefully attended to.

Tetanus.—Professor F. Knowles, of the Iowa Medical College, reports (*Iowa Med. Jour.*, Feb.) three cases of well-marked traumatic tetanus which were cured by the administration of tincture of lobelia every ten minutes, together with a decoction of capsicum. As soon as emesis was excited, the symptoms were mitigated, and in a few hours all spasmodic action ceased!

EDITORIAL.

The General Assembly has at last incorporated a "Medical College of Virginia." We are satisfied that the Profession will cordially approve of the charter under which this institution is founded. It may have its defects, like every other work of human hands, but it is based on correct principles and establishes a fair educational organization.

The new college is governed by a board of nineteen visitors, appointed from different portions of the State. It will be only necessary to enumerate the gentlemen who have been selected for this honourable distinction, to enlist the confidence of the Profession in the institution which is under their control: C. W. Russell, of Wheeling, Wyndham Robertson, of Abingdon, Robert Grattan, of Rockingham, Dr. Francis T. Stribling, of Staunton, Dr. W. D. McGuire, of Clarke, J. S. Barbour, jr., of Culpeper, H. H. Marshall, of Charlotte, S. O. Southall, of Prince Edward, Dr. Geo. L. Nicholson, of Middlesex, Dr. B. R. Wellford, of Fredericksburg, Dr. Jesse J. Simpkins, of Norfolk, Dr. L. S. Joynes, of Accomack, T. Wallace, of Petersburg, W. Newton, of Westmoreland, J. A. Seddon, of Goochland, J. M. Patton, Dr. R. H. Cabell, James Lyons and W. H. Macfarland, of Richmond.

This corporation is endowed with the property heretofore used for the purposes of the medical school in Richmond, and with full powers over the faculty to be appointed hereafter. It contains a larger medical ingredient than can be found in the governing boards of every school in Philadelphia, New York and Boston combined. The interests of the public are represented by men of acknowledged worth. In short, the State has done us full justice. It remains for physicians to do themselves justice, by co-operating with the State in its efforts to afford its youth every advantage of education both general and special.

The medical department of the University of Virginia, with its long session of nine months, its careful method of teaching, and the opportunities which it affords the student of remedying defects in preliminary education, is justly regarded as the best preparatory medical school in the country. We have now the organization of a college in

the metropolis, not in the hands of private parties, or controlled by a Richmond junto, but governed by men from all parts of the State, whereat the student may complete his medical curriculum.

We trust that the medical men of the State will support these two schools cordially, burying all jealousies and heart-burnings, discarding the trivial objections which factionists will not cease to urge. We may then build up two noble institutions in our midst, and successfully contend with those Northern schools which have for years drained the State of its medical students.

Let the Virginia youth who are now preparing to enter upon the study of medicine, avail themselves with one accord, of the advantages their own old mother offers; let them remain *at home*, studying disease as it exists around them, and practice adapted to the circumstances of climate and race which they will encounter on their entrance into the profession.

Virginia has now a complete system of medical instruction, and calls upon her sons to give it efficiency. Let us unite therefore, and prove, in the winter of 1854-55, our ability to have schools of our own, and our independence of the Medical Colleges of the North.

BIBLIOGRAPHICAL RECORD.

I. New Publications.

Next to religion, medicine probably produces the most books. Its literary paraphernalia, always extensive enough, has become enormous, since this science, so vast in its own sphere, this art, so complicated in its immediate objects, has been augmented by what are called the collateral sciences. There is scarcely a branch, in fact, of the natural and physical, and even of the metaphysical, moral and political sciences which has not grafted itself in some way on medicine. It has become the omni-science, so to speak, which is very flattering, no doubt, to those who possess it, but rather embarrassing, it must be confessed, to those who study it. In this gigantic growth, does it not lose, perhaps, in profoundness what it gains in extent? Time alone can answer; but while we await the critical decision of this great judge, we willingly enrol ourselves among that probably small band, who are a little suspicious of the value of these acquisitions, and who, instead

of encouraging the luxuriant vegetation of the medical tree, feel disposed to prune it. The encyclopædic accumulation of facts which no one head can contain, and which enter, nevertheless, into the present programme of the studies of a cultivated physician is rather harmful than useful in a practical point of view. The accomplished graduate in the midst of much that is superfluous, often lacks what is necessary. This is the natural tendency in all sciences. Dr. Latham says that he once saw a list of books recommended by a professor of divinity, for the study of those going into holy orders, which were more numerous than the majority of studious men, even, read in their whole lives; yet these were a few prolegomena to the office of a parish priest. Vitruvius, enumerating the studies in which an accomplished architect should engage, places the science of acoustics in the first rank, since without a knowledge of sound, he says, it is impossible to construct properly edifices devoted to music or eloquence. The dancing-master in the *Bourgeois Gentilhomme* asserts, on his part, that his science is indispensable to well-bred ladies and statesmen to prevent them from making *faux pas*; thus dancing becomes an accessory to social and political science. Is it not somewhat in the same spirit that so many diverse scientific ingredients are now-a-days mingled in the study of medicine. "It is all very fine to insist that the eye cannot be understood without a knowledge of optics, nor the circulation without hydraulics; that metaphysics may have their use in leading us through the intricate functions of the nervous system, and the mysterious connections of mind and matter. It is a truth; and it is a truth also that the whole circle of the sciences is required to comprehend a single atom of matter: but the most solemn truth of all is, that the life of man is three score years and ten."

Whatever we may think of this encyclopædism in a doctrinal point of view, its effect is, as we have said, a huge supply of books. These works are anxious that their existence should be made known, and all ask for a blast of the editorial trumpet. They besiege the doors of the journals, find their way through every avenue into the editorial sanctums, encumber the stair-ways, and speak all at once. They are a kind of *rapping spirits* which are particularly presumptuous. Those which come from abroad are more modest; they only speak when they are spoken to; whereas the home publications are clamorous for instant recognition. With a view of shutting the mouths of the most importunate, of inducing others to have patience, and of fulfilling the engagement into which it has been rash enough to enter in regard to its BIBLIOGRAPHICAL RECORD, the VIRGINIA JOURNAL will present from time to time a cursory review of the accumulated contents of its critical *atelier*. This summary will embrace also, for the benefit of those who follow the movement of science in all countries, an enumeration of the most important foreign works which have recently appeared.

In *Medicine*, we owe a first mention to the monograph of that accomplished scholar, Dr. René Laroche, of Philadelphia, on pneumonia and autumnal fevers, in their relation to malaria. This work should be carefully studied by southern physicians, embodying, as it does, the

reflections of an original thinker and close observer on a subject peculiarly their own.

Dr. Bennet Dowler's "Tableau of the Yellow Fever, 1853," in a pamphlet of 62 closely printed pages, will be read with interest at this time. We shall reserve our notice of it until the appearance of Dr. Fenner's book on the same subject.

Dr. Austin Flint has sent us two clinical reports, one on "Chronic Pleurisy" (pp. 58), the other on "Dysentery" (pp. 90). This physician's contributions to medical science are characterized by lucidness of arrangement and an absence of vague generalization. He adopts the numerical method in his enquiries, using it with judgment and skill, without perverting its applications, or making it the basis of unwarrantable deductions. The report on pleurisy is based on an analysis of 47 cases; it evolves little that is new, but is useful as confirmatory of opinions already received. Dr. Flint inclines to admit the utility of thoracentesis, but adduces no experience of his own on the subject. His opinion appears to be based on the recent researches of Dr. Bowditch, and to be formed without reference to the more extended investigations of Barth, Boinet, and Aran.

Dr. Bowditch, in two long papers in the new *American Medical Monthly*, quite runs away with this whole subject,—of thoracentesis in pleuritic effusion. Fortunately the statistics which stand at the close of his essay will neutralize the argumentation of the first part. Of 24 cases *five* were examples of *dry tapping*! Eight died, and two were likely to die; thirteen recovered.

Besides these home productions, we have Dr. Fuller's treatise on Rheumatism, Rheumatic Gout and Sciatica, an admirable practical book, which is reprinted in this country by the Messrs. Wood, of New York; who are also preparing Gregory's Lectures on Eruptive Fevers.

Messrs. Lindsay & Blakiston offer Dr. Stokes' new work on Diseases of the Heart and Aorta, which will be read universally, no doubt. "Bennett on Tuberculosis" is appearing in monthly parts.

In Germany, they have commenced an elaborate systematic work,* edited by Virchow, assisted by an association of physicians. Vogel will write on kidney diseases, Hebra on cutaneous affections, Hasse on nervous diseases, and Lebert on diseases of the blood. The work will be one of great extent.

Weber has published, at Kiel, his investigations into the pathological anatomy of new-born children (*Beitrage zur pathologischen anatomie*); we find it hard to understand the utility of studying lesions by themselves, unconnected with their symptoms. Dr. Scherer's book, on the general pathology of children's diseases (*Die eigenthumlichkeiten*. Leipzig, 1852) would seem to be a more useful work.

Dr. Auber has published his "General Principles of Medical Science,"† interpreted according to the doctrines of what is called in France *Hippocratic Vitalism*.

As might be expected, cholera literature is becoming popular. Mr.

* *Handbuch der speciellen Pathologie und Therapie*. Erlangen. 1854.

† *Traité de la Science Médicale*. 8vo., pp. 664. Paris. Germer Baillière, 1853.

Barwell, Demonstrator of Anatomy to St. George's Hospital, is out in a complete treatise of 219 pages, the morbid anatomy translated from Reinhardt. We have also the report of the sub-committee of the R. C. S. on cholera, an Analysis of the Official Reports on Cholera in Sweden, by Dr. Berg,† a Report on the cholera in Poland, translated into French by Dr. Smith, of Varsovia, with several small treatises by Drs. Pearn, Gilkrest, and Alison. The most complete paper on this subject is the Report of the French Commission on Cholera, recently read by M. Jolly to the Academy of Medicine.

In *Surgery*, the labours of our native authors are comprised in the Transactions of different associations to which we have already called attention. Dr. John Watson's paper on the Surgical Diseases of Children, and Dr. Crosby's observations on the uses of adhesive plaster as a means of extension in fractures, are among the more important magazine articles. Professor Erichsen's "Science and Art of Surgery," (8vo., pp. 951) is a comprehensive and useful work. It is reprinted in this country. The Messrs. Wood are preparing for the press that portion of Jobert's great work on autoplasmic surgery which treats of operations on the female genitals.

Velpeau has published an illustrated octavo on diseases of the mammary gland. The third volume of Nélaton's excellent "Elements of Surgical Pathology" is also before the public. Dr. Reybard, of Lyons, has at last printed his prize essay on strictures of the urethra. This work received the Argenteuil Prize (12,000 fr.) from the Academy of Medicine. It is pronounced "the most complete and reliable work extant" on the subject. M. Jarjavay, one of the most promising of the young French surgeons, has published the first volume of a treatise on surgical anatomy. Dr. Bonnet, of Lyons, whose work on the pathology of the diseases of the joints is well known, has just issued a supplementary volume "On the Therapeutics of Diseases of the Joints." Phillippe Boyer has completed the fifth edition of his father's surgical writings. M. Gerdy has published the third volume of his systematic surgery. M. Jamain offers an instructive little manual of minor surgery.

The American press has favoured us with several works on *Anatomy*. Besides Dr. Handy's treatise, we have a "General, Descriptive and Practical Anatomy," (p. 734,) by Dr. T. G. Richardson, Demonstrator of Anatomy in the University of Louisville. The attempts of the younger members of our profession to free us from our slavish dependence on foreign literature, cannot be too highly commended.

Gould and Lincoln, of Boston, have published the first volume of the "Comparative Anatomy" of Siebold and Stannius, translated by Dr. Waldo I. Burnett, who is well known by his own researches in minute anatomy. This volume comprises the anatomy of the invertebrata. The second volume on the anatomy of vertebrate animals is in press.

The more profound students of *Physiology* will be glad to obtain the

† *Sammandrag af Officieller Rapport om Cholerafarsøtten i Sverige. Af F. TH. BERG.* Stockholm. 8vo., pp. 370.

latin work of Keber, of Königsberg, "on the entrance of the spermatozoon into the ovum," (4to., pp. 120, plates.) Valentin's "Text book of Physiology" has been translated into English by Dr. Brinton. Bischoff has written a work on "Urea as a measure of the Metamorphosis of Tissue." Another part of Ludwig's profound work has been recently published. Lehmann's great work on "Physiological Chemistry" has reached a second edition.

The Transactions of the French Biological Society for this year contain a memoir by Claude Bernard on the "Saliva." This eminent physiologist has also published his lectures at the College of France "On the Absorption of Gases and Liquids."

Becquerel and Rodier have published a work "On Pathological Chemistry," a subject on which their authority is already admitted. A great work has been published by Wedl, of Vienna, on a kindred branch of enquiry, "Pathological Histology."

In *Materia Medica* we have the continuation of the learned work of Dr. Tully, of Springfield, and the second volume of Pereira's encyclopædian treatise, completed by Drs. Taylor and Rees, and edited, in this country, by Professor Carson. Dr. Cock, of New York, has published a third edition of the "Prescriber's Pharmacopœia." The lectures of the late J. B. Beck have been published by his friend, Dr. Gilman, of New York.

There are no special works on *Obstetrics*. In the domain disputed by the surgeons and man-midwives, we have a work by Professor Meigs, the illustrations "in the highest style of art;" the various appearances of the unhappy cervix being delineated, in some instances, by the versatile author himself.

Among *miscellaneous subjects* we may mention Dr. Van Oven's late interesting treatise on the "Decline of Life in Health and Disease;" Dr. Simpson's masterly refutation of the fallacies of Homœopathy, and Dr. Henderson's reply thereto, and Dr. Noble's "Elements of Psychological Medicine."

We have thus enumerated the chief additions which have recently been made to medical literature. We shall have occasion to refer to some of them more at length; for the majority this brief notice must suffice.

II. *Fibro-bronchitis and Rheumatic Pneumonia.* By THOMAS H. BUCKLER, M. D., of Baltimore. 8vo., pp. 150. Philadelphia, 1853. Blanchard & Lea (From Mr. J. Woodhouse.)

In this essay Dr. Buckler attempts to prove two distinct affections are confounded in the disease commonly called bronchitis, and would amend the nosology by introducing the terms muco-bronchitis or catarrh, and fibro-bronchitis, or inflammation of the fibrous structure of the air-tubes. He also describes a form of pneumonia in which the engorgement of the pulmonary parenchyma depends upon pre-existing fibro-bronchitis.

The utility of these distinctions is alleged to consist in the fact that

these inflammations are connected with the rheumatic element, and are only amenable to treatment adapted to this type of disease.

To get over the awkward demand for a demonstration of the existence of this inflammation of the fibrous tissue of the air-tubes, the author adduces the fact that the *post-mortem* appearances of sclerotitis and other inflammations of fibrous structures amount to nothing.

Dr. Buckler enters into the "vascular mechanism of the pulmonary circulation," the true nature of the rheumatic element, adduces eleven illustrative cases, and gives his views of the treatment of rheumatic or fibro-bronchitis and pneumonia.

As to the frequency of this disease, Dr. Buckler believes that of twelve cases of catarrh *five* will be of the rheumatic variety.

The practitioner will find in this essay many practical suggestions of value, combined, we fear, with a disposition to generalize upon insufficient data, and to place too much reliance upon the imperfect notions of animal chemistry to which we have thus far attained.

The essay is evidently the work of a man of reading and experience, and we have derived much pleasure from our hasty examination of it.

V A R I E T I E S .

Dr. Thomas Robinson.

In a late number of the *Petersburg Intelligencer*, we find the subjoined interesting tribute to one whose memory is cherished by the profession in Virginia, on which he reflected honour, and by the citizens of Petersburg, where, for upwards of thirty years he dispensed the benefits of his professional skill, and the light of his many virtues.

Dr. Robinson, it is well known, was an Irishman, a companion of Emmett and the other leading patriots of the afflicted country from which he was exiled in early life. He possessed all the warm-heartedness and generosity of his countryman, but in addition to this, a profound and accurate knowledge of the science to which he devoted himself.

When the yellow fever ravaged Philadelphia in 1804, he was appointed physician to the hospital or lazaretto established for the sick. After the subsidence of the pestilence the following letter, which has recently been found among his papers, was addressed to him by those who witnessed his fidelity to the important trust reposed in him :

HEALTH OFFICE, Oct: 28, 1804.

*Dear Sir :—*Upon the present occasion the Board of Health would deem it equal injustice to you and to themselves to observe the formality of official expression.

The ingenuousness of your character will pardon the avowal that when we appointed you to the arduous and important station you occupy, it was not without fear and solicitude. The duties to be performed required a combination of qualities not always found in the most experienced of the medical profession.

Highly as they had appreciated your talents and your merits, they with pleasure found that your success in the treatment of the multifarious diseases of such a numerous body of patients, outstripped their most sanguine hopes.

By the dispatches received to-day we find ourselves enabled to release you from further attention to duties which nothing less than the love of humanity could have enabled any one so zealously to perform.

It must be a sweet reflection, that by your skill you have saved so many fathers and mothers to their children ; so many children to their parents ; so many others to connexions, perhaps not less dear, and the whole to the human family on their arrival in a country blessed with better auspices than those they had left.

The Board learn with regret that your intention is not to remain here ; but wherever you go you may rely on their best wishes and the merited pledge of their constant regard.

Signed by order of the Board.

JAMES REYNOLDS, Sec'y.

DR. THOMAS ROBINSON, Lazaretto.

We have received from Dr. Bennet Dowler, of New Orleans, an interesting communication, respecting the establishment and objects of the "Royal Society of Northern Antiquarians" at Copenhagen, which is presided over by the king of Denmark, and embraces among its members many distinguished American as well as European scholars. Dr. Dowler has himself been recently elected a fellow of this society.

An American department was established in 1844, entitled the "Museum Americanum," and a repository assigned to it, wherein have already been deposited many ante-Columbian antiquities, casts of Mexican heads, specimens of arrows from different states, with interesting historical relics from Greenland and the country of the Esquimaux.

The late Col. Bliss, who was a proficient in the northern languages, made great efforts to direct the attention of his countrymen to these antiquities, and presented to the library some very valuable books. His loss is much deplored by the antiquarian society.

There is, we think, but little doubt that America was discovered by northern Danish navigators, five centuries before the enterprize of Columbus. Beside the "old stone mill" in Rhode Island, there is abundant evidence of the settlement of Vinland by the Scandinavians, and we feel it to be no sacrifice of our Columbian spirit to yield to the pride of an Icelandic historian (Snovo Sturtison) the glory which he deigns for his ancestors, of the discovery in the 10th century of the Western hemisphere. We thank Dr. Dowler for his interesting communication, and we hope that Virginia, so rich in historic "lore and relic" will

contribute something to the Museum Americanum, being assured that on the distant shores of the Baltic, she will find a safe and appreciative asylum for such valued relics of the past.

MEDICAL SCHOOL OF ATHENS.—Professor Blackie recently delivered a lecture in Edinburgh, in which he maintained that the Greek was in no sense a dead, but a living language, and could, of course, be much more conveniently acquired by intercourse with living Greeks than by the usual round of scholastic appliances. The *Edinburgh Monthly Journal* publishes a programme of the course of lectures delivered in the University of Athens during the summer session of 1853, from which it appears that the professors in that institution are marshalled under four faculties—the theological, the legal, the medical, and the philosophical,—precisely after the German model. The programme of the medical school is as follows :

Special Nosology and Therapeutics 5 times a week, by Prof. Makkas. Obstetrics 3 times a week, and Practical Obstetrics twice a week, by Prof. Kostas. Clinical Surgery 5 times a week, by Profs. Olympios and Petsales. Physiology 5 times a week, by Prof. Damianos. Clinical Medicine 5 times a week, by Prof. Makkas. Systematic Surgery 5 times a week, by Prof. Olympios. Gen. Anatomy 3 times a week, and Path. Anatomy 3 times a week, by Prof. Aphentoseles. Path. Anatomy 3 times a week, by Mr. Œginetes. Diseases of the eye twice a week, by Prof. Olympios. Hygiene 4 times a week, and Medical History once a week, by Prof. Prinares. On Nervous Diseases 3 times a week, and Syphilis twice a week, by Prof. Benezelos. On Comp. Anatomy and Physiology 3 times a week, by Mr. Busakes. On Toxicology 3 times a week, by Prof. Palles.

The winter programme presents some variations, into the details of which we need not enter. From the full course of medical education here detailed, it is clear that any young man desirous of learning Greek, might, without loss of time in his medical studies, pass a session at the University of Athens.

MEDICAL NEWS AND ITEMS.

REMOVAL OF A RING FROM A YOUNG WOMAN'S FINGER.—Dr. Castle reports in the *Boston Medical and Surgical Journal* a case in which a small gold ring was forced over the joints of the middle finger, and gave rise to great swelling and inflammation. After bruising and lacerating the flesh in futile attempts to divide the ring with saws and cutting nippers, and applying leeches and fomentations, the attending surgeon summoned Dr. Castle, who procured some powdered

chalk and applied it between the ridges of swollen flesh and all round the finger, and succeeded in drying the abraded skin, and in polishing the ring with a piece of fine linen. Quicksilver was then applied to the ring. In less than three minutes the ring was broken into four fragments by slight pressure, and the patient was rescued from her "deplorable state of mental agony."

CHOLERA.—Cholera, though subsided at Newcastle, is spreading in London. Propositions have been made to meet it by the appointment of a day for general national fasting. The Presbytery of Edinburgh have written to Lord Palmerston on the subject, and have received a reply from that practical statesman to the effect that no fast would be appointed by royal authority, and that, in his opinion, if all the existing causes of disease be allowed to remain, they will infallibly "be fruitful in death, in spite of all the prayers and fastings of an united but inactive nation." He adds: "When man has done his utmost for his own safety, then is the time to invoke the blessing of Heaven to give effect to his exertions."

PROFESSOR GOODE, the eminent teacher of anatomy in Edinburgh, who has been in declining health for some time, has been compelled to forego his course of lectures for the present winter. He has gone to Nice to avoid the severity of the northern climate.

THE ROYAL SOCIETY.—The first meeting of this learned body for the session 1853-54 was held November 17th, Dr. Wallick, V. P., in the chair. Robert Lee, M. D., read a paper on the "nerves of the muscular structure of the heart." A series of dissections of the heart of the race-horse, demonstrated that from the outer surface to the lining membrane the walls of the heart are universally pervaded with nerves, on which ganglia are formed.

NEW SCIENTIFIC BIOGRAPHIES.—Two biographies, for which the world has long and anxiously waited, are about to be published. Sir David Brewster has in press *Memoirs of the Life, Writings and Discoveries of Sir Isaac Newton*, drawn up from very full materials, including manuscripts of great interest hitherto unpublished.

Dr. William Charles Henry has nearly completed a *Life of Dr. John Dalton*, which will be published early next year by the Cavendish Society. Dalton died in 1844. He named Dr. Henry his literary executor, and left him by will his papers. The forthcoming life will be a welcome addition to our too scanty stock of scientific biographies.—*Edinburgh Monthly Journal*.

PRIZE FOR THE CURE OF CHOLERA.—The Academy of Sciences of Paris has received the legacy of 100,000 francs (\$20,000) from a munificent philanthropist, M. Breant, as a recompense for him who shall discover a remedy for cholera. As it is unlikely that this will be soon awarded, it is proposed to give the annual interest for the most useful discovery relating to cholera. During the first empire a similar sum was left for the curer of croup, which has not yet been awarded.—*Gazette Medicale de Paris*.

A PHYSICIAN BY ROYAL ORDINANCE.—The Spanish Journals *el Porvenir Medico* and *Boletin Medicina* announce that an individual utterly unacquainted with the healing art has been authorized by royal ordinance to practice medicine at Barcelona, and call upon the entire profession in Spain to protest against this decree. The sovereign people of our more favoured land are constantly granting similar privileges to the uneducated, and the humble remonstrances of the body medical are regarded as illiberal and selfish in the highest degree.

SOOT AS A DEODOURIZER.—Dr. Elliott, of Carlisle, says that in Carlisle great assistance has been derived, at little cost, during the removal of manure, otherwise so perilous, by the immediate use of a few shovelful of soot. This substance is generally had in abundance where quick lime is scarce, and vice versa.—*London Lancet*.

GOOD OLD TIMES IN THE LONDON HOSPITALS.—Dr. Last never trifled with disease. His direction was: "Bleed the North ward and blister the South ward to-day; and blister the North and bleed the South ward to-morrow."—*Dr. Tyler Smith's Introductory Lecture.*

VACCINE.—Dr. Tinsley, of Cuba, claims to have discovered that "vaccine virus after passing through the system of the negro is valueless for the white race."—*Med. Examiner.*

The N. Y. Society for the Relief of the Widows and Orphans of Medical Men, met on the evening of December 6th, at the Crosby St. Medical College. Dr. Isaac Wood was elected President for the ensuing year. The receipts of the Society for the past year were \$15,238.

In Massachusetts there are 1406 individuals engaged in the practice of medicine. The population of the State is 994,656. Ratio: 1 in 707.

REMARKABLE LONGEVITY.—The Petersburg Express chronicles the death of Hannah, a negro woman, owned by a lady in that city, at the advanced age of 128. She died of no particular disease, but sank under the exhaustion incident to extreme old age. She was born in Powhatan county, Va.

NAVAL MEDICAL BOARD.—A Board of Naval Surgeons will assemble at the Naval Asylum, Philadelphia, on Monday, March 6th, for the examination of Assistant-Surgeons for promotion, and candidates for admission into the medical staff of the Navy. The Board will consist of: Thomas Dillard, President, J. M. Greene and W. S. W. Ruschenberger, members; and A. A. Henderson, Recorder.

AMERICAN MEDICAL MONTHLY.—This is the title of a new journal, conducted by the professors of the N. Y. Medical College, published by Mr. Putnam, and edited by Ed. H. Parker, M. D. The numbers for January and February are favourable specimens of periodical medical literature. They indicate that the journal has resources of its own, and does not intend to live upon the common stock without contributing a fair proportion in its turn.

MORTALITY OF NEW YORK.—Small-pox has been very prevalent and fatal in New York during the last two months. The weekly bills of mortality indicate that its victims are more numerous than those of any other disease. Erysipelas is also common; the simple operation of vaccination has induced it in a large number of cases.

NECROLOGICAL RECORD.—DIED, in New York, at the age of 62 years, Dr. THOMAS G. MOWER, U. S. A.

———In New Orleans, December 1st, ABNER HESTER, M. D., the talented editor of the N. O. Med. and Surg. Journal. Dr. H. was only 40 years of age. His premature death is a real loss to the profession.

———In Philadelphia, January 4th, in the 54th year of his age, SAMUEL McCLELLAN, M. D., formerly Professor of Midwifery in the Jefferson Medical School.

———In Dinwiddie county, Va., December 15th, 1853, ROBERT E. WALL, M. D., U. S. A.

———In Philadelphia, January 23d, R. M. BIRD, M. D., one of the editors of the North American.

———In London, December 25th, 1853, JAMES GILKREST, M. D., Inspector General of Army Hospitals, and Correspondent of the French Academy of Medicine.

———In Laurens county, Ga., Dr. A. A. GITTEAU, after completing his 35th year. He was a native of Ireland, and emigrated to this country in 1846.

———In Cooper county, Mo., on December 5th, 1853, Dr. GABRIEL TUTT, aged 60. Dr. Tutt was a native of Virginia, but for the last eighteen years resided in Missouri, where he was respected as a practitioner and man.

———In Moscow, Dr. FISCHER DE WALDHEIM, the distinguished naturalist, aged 82.

EPIDEMICS OF VIRGINIA AND NORTH CAROLINA.

The undersigned having been appointed to report to the American Medical Association at its next Annual Session, on the Epidemics of Virginia and North Carolina, hereby begs to direct the attention of medical gentlemen to the subject.

It will be only by the co-operation of the Profession that the report can be completed; he therefore respectfully requests that accounts of Epidemics occurring within the year be drawn up by those who have encountered them, and forwarded to his address on or before the 1st March next.

J. F. PEEBLES, M. D.,
Petersburg, Va.

Oct. 1853.

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
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[April—tf.]

INDEX.

- Abernethy, life of, 251
 Academy of sciences, transactions of, 230
 Achorion Schonleinii, 137
 Adulteration of drugs, 66
 Agassiz, anecdote of, 74
 Agassiz, communication of, 231
 Alabama, yellow fever in, 330
 Albuminuria in pregnant women, 306
 Alcohol, resolvent action of, 157
 Alcoholic liquors, Carpenter on, 419
 Alcoholic liquors, Corson on, 247
 Amaurosis, strychnia in, 500
 Ammusat on electricity in surgery, 67
 Amputation of the shoulder-joint, 274
 Anasarca, manganese in, 309
 Anasarca, hair-cap moss in, 403
 Aneurism of the aorta, 145, 309
 Aneurism, treatment of, 291, 497
 Andral, lecture by, 221
 Anatomy, text-book of, 425
 Anglada on contagion and infection, 323
 Aorta, ligature of, 145
 Aphonia, iodine inhalations in, 211
 Apnoea, forced insufflation in, 211
 Archetype of the vertebrate skeleton, 187
 Arago, death of, 165, 226
 Aran on tonsillitis, 286
 Areolar cancer, 287
 Ascites, 153
 Aural surgery, Wilde on, 233

 Balms, 152
 Barthez and Rilliet on children's diseases, 242
 Becquerel and Rodier on the blood, 58
 Belladonna in convulsive affections, 284
 Bennet on rheumatism, 404
 Berlin, medical schools of, 319
 Bernard on polydipsia, 392
 Berry on affections of the lacrymal sac, 37
 Births, marriages and deaths, 74
 Blood, Riddell on, 281
 Boinet's treatment of fistula in ano, 147
 Bolton on secret remedies, 121
 Borchman on croup, 229
 Bouchut on children's diseases, 77
 Bowman on epiphora, 310
 Boylston prizes, 160
 Brainard on the bite of rattlesnakes, 496
 Breast pumps, Needham's, 223
 Bricheteau on a case of suicide, 401
 Brierre de Boismont on hallucinations, 84
 Briquet on cinchona, 331
 Brochieri, Eau de, 152
 Brown Sequard's pathological researches, 342
 Bubo, Haslett on, 309
 Buckner, death of, 165
 Budd on the blood in jaundice, 58
 Budge on the iris, 64
 Buchring's orthopaedic institution, 321
 Bull on the maternal management of children, 85
 Bumstead's translation of Ricord, 240
 Burnett on fecundation, 190

 Cancer, epithelial, 287
 Cancer, caustic for, 501
 Capillaries, origin of, 281
 Cataract, fluid, 399
 Cataract, fluid, congenital, 401
 Cataract in an aged patient, 400
 Cataract, double, 276
 Cardialgia, resection of xyphoid cartilage in, 154
 Cazeaux's case of dystocia, 204
 Cellulose in the animal organism, 195
 Cerebral complications of rheumatism, 488
 Charlottesville, medical meeting in, 118
 Cholera, 225, 309
 Chloro-anæmia, 154
 Chloroform, deaths from, 326, 427
 Chloroform in midwifery, 428, 153
 Chloroform, uses of, 174
 Chloroform in tetanus, 94
 Chloroform, Jobert on, 233
 Children's diseases, 388, 242, 77

- Cinchona**, Briquet on, 331
Clinical reports of Richmond infirmary, 274
Colloid cancer, 287
Congenital fractures, 493
Coup de soleil, 490
Cow-pox, 140
Creosote, 154
Croup, fomentations of i e in, 229
Croup, Hertz on, 396

Datura stramonium, poisoning by, 225
Deane on crural hernia, 268
Dewalsche on the treatment of rheumatism, 97
Diabetes, gangrene in, 232
Diet, Davy on, 307
Dubarry, death of, 165
Dysentery, Mettauer on, 452

Elderberries, syrup of, 487
Elephantiasis of the Greeks, 309, 357
Emphysema, general, 388
Encephaloid with Molluscum, 289
Entropion, operation for, 310
Endemic diseases of Sweden, 106
Epidemics, 72, 220
Eye, Lawrence on the, 420

Fatty matters, origin of, 195
Fecundation, *modus operandi* of, 190
Femoral vein, 146
Fever, continued, 154
Fever, intermittent, 154, 403
Fever, transformation of, 140
Fever, typhoid, 489, 1
Fever, Upshur on, 433
Fisher, Dr. E. C., 160
Fistula in ano, 147
Fistula, intestinal, 275
Flathead indians, crania of, 376
Flint, report on surgery, 416
Fractures of the extremities, 81
Fractures, congenital, 493
Fractures, Crocq on, 81
Furuncles, 68

Gangrene of the lungs, 211
Gangrene in diabetes, 232
Gibert's letter to Cayol, 7
Gleet, 68, 501
Gout, 403, 490
Goitre, Otis on, 115

Hæmorrhage, shepherd's purse in, 387
Hæmorrhage from the umbilicus, 49, 220
Hæmostatics, 151
Hall on the spinal system, 257, 345
Hall, Dr. Marshall, 226, 410

Hallucination, Boismont on, 84
Hays' edition of Lawrence, 423
Henriette on peritonitis in children, 181
Hernia, cold douche in, 211
Hernia, Deane on, 206
Homœopathy, 160
Hospital practice, 434
Hunter's case of somnolence, 113
Huss on the diseases of Sweden, 106
Hufeland's art of prolonging life, 251
Hydrophobia, 211, 406
Hydrocephalus, 69, 458
Hydrocele, 502
Hygiene of cities, 411
Hysteria, nympho-maniacal, 143
Hysterotomy, Patterson on, 264

Impalement on a pitch-fork, 148
Inflammation, peri-uterine, 363
Inflammation, Latour on, 394
Iodide of zinc, 386
Iodine, new preparations of, 66, 387
Iodine in pharyngitis, 212
Iowa medical journal, 75
Iris, Budge on, 64
Itch, Vleminckx on, 197

Jefferson's notes on Virginia, 341
Johnson on craniology, 376
Johnson on paralysis of motor oculi, 277
Journal fur kinderkrankheiten, 227

Kolliker on structure of the liver, 282
Kolliker on the retina, 196

Lacrymal sac, obliteration of, 37, 423
Leucorrhœa, Sigmund on, 205
Lightning, death from, 65
Liver, structure of, 282

Mammary abscess, 310
Magnesia, citrate of, 486
Materia medica, Tully's, 424
Mayo's clinical reports, 274
Menorrhagia, 310
McCaw on the profession in Virginia, 41
McCaw's memoir of McClurg, 465
Mettauer's contributions to pharmacy, 89
Mettauer on dysentery, 452
Microscopist, Wythe's, 84
Medico chirurgical society, 126, 253
Minie rifle wounds, 495
Molluscum, case of, 289
Motor oculi, paralysis of, 277

Necrological record, 159, 165
Neuralgia, facial, 155

New publications,
Nickel's elastic plaster, 388

Obstetrics, manuel of, 166
Ophthalmic surgery, 84
Ossicula auditus, 65
Otis on excision of the thyroid gland, 115
Otis on umbilical hæmorrhage, 49
Otalgia, 69
Osteo-myelitis, 492
Ovariectomy in cows, 162
Owen on the vertebrate skeleton, 187

Paget's lectures, 251
Parker's case of tetanus, 494
Paralysis third pair of nerves, 277
Paralysis of the bladder, 211
Paraplegia, 310
Patteson on hysterotomy, 264
Patteson on purpura, 482
Perchloride of iron in aneurism, 298
Pennsylvania medical society, 244
Perforations of the lung, 199
Pertussis, 211, 155
Peticolas on osteoid cancer, 380
Peticolas on vaccine law, 445
Pharmacy, contributions to, 89
Phthisis, 155, 212, 199
Physician's visiting list, 86
Physician's vade mecum, 85
Pharyngitis, 212
Polydipsia, Bernard on, 392
Pharmaceutical association, 339
Phrenic nerve, 195
Pneumonia, veratrine in, 155
Pneumonia, 383, 404, 502
Pollard on elephantiasis, 357
Poisonous puffs, 74
Pregnancy, protracted, 299
Prize essay, 160
Prolapsis uteri, 212
Prolapsis ani, 269
Prodigy, a, 312

Quercinus, liquor, 155
Quinine, Upshur on, 444
Quinine, Briquet on, 331
Quinine, Pagliari on, 487

Rattlesnake's bite, 496
Retina, structure of, 196

Rheumatism, expectant treatment in, 97

Rheumatism, 404
Rheumatism, complications of, 404
Ringworm, Jenner on, 134

Sarsaparilla mania, 163
Scapulalgia, Malgaigne on, 206
Scarlatina, Trousseau on, 128
Scrofula, proteine in, 311
Seamen, diseases of, 169
Semple on pneumonia, 383
Secret remedies, 213
Servetus, 162
Speculum, intra-uterine, 163
State medical school, 158, 313
State medical journal, 71, 216
Statistics, 156
Strabismus, prismatic spectacles in, 155
Sun stroke, Cartwright on, 490
Suicide, case of, 401
Syphilis, 212, 240, 249

Tænia, pumpkin seed oil in, 158
Tænia, male shield fern in, 156
Tenoraphy, Sedillot on, 311
Tetanus, 94, 212, 503
Thomas, Dr., 158
Tonsillitis, 286
Toothache, 311
Tubercular meningitis, 458
Typhoid fever and typhoidism, 1
Typhoid fever, 162, 489, 245

Urea, Draper on, 266
Upshur's hospital cases, 433
Urethra, rupture of, 360
Urethroscope, 226
Uterine gout, 490
Uterine catarrh, Sigmund on,
Uva ursi as an ecbohe, 386

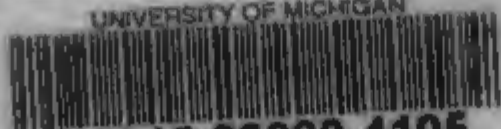
Valleix on peri-uterine phlegmon, 363
Valerian in convulsive affections, 284
Venereal diseases, 249, 240
Vesico vaginal fistula, 243
Vienna, medical school of, 219

Warren on chloroform, 174
Watson, death of, 159
Wilde on the ear, 233
Zinc, iodide of, 386





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